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An examination of parental and individual factors in predicting ethnic identity

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ABSTRACT

AN EXAMINATION OF PARENTAL AND INDIVIDUAL FACTORS
IN PREDICTING ETHNIC IDENTITY

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The current thesis project investigated relationships among family ethnic cultural socialization, self-esteem, phenotype characteristics, and ethnic identity in an ethnic minority college student sample. Consistent with previous research, family ethnic cultural socialization was found to be associated with ethnic identity and self-esteem. Two of the three components of ethnic identity examined were associated with self-esteem. It was found that the relationship between family ethnic cultural socialization and self-esteem was mediated by ethnic identity. Analyses that examined phenotype characteristics as moderators in the relationship between family ethnic cultural socialization and ethnic identity did not reveal significant results.

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AN EXAMINATION OF PARENTAL AND INDIVIDUAL FACTORS IN PREDICTING ETHNIC IDENTITY

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DEDICATION

I dedicate this thesis to my children, who I hope always enjoy and value the pursuit of knowledge. To my parents and brother, for their support and willingness to provide free babysitting. This work is also dedicated to the memory of my Aunt Carolyn, who encouraged me to go all the way and taught me that success in statistics is just a matter of persistence.

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INTRODUCTION

In a 2010 Census brief, the United States Census Bureau reported that although the non-Hispanic White population in the United States remains the largest racial-ethnic group in the country, there has been considerable growth in other populations. Between 2000 and 2010, there was a 43% increase in the Asian population (U.S. Census Bureau, 2011). Also within that time frame, there was a 43% increase in the Hispanic[1] population; the growth in this population accounted for over half of the total population growth between 2000 and 2010 (U.S. Census Bureau, 2011). In contrast, the non-Hispanic White population grew at the slowest rate, being the only group to show a decrease in terms of its proportion of the total population (U.S. Census Bureau, 2011).

The Census data indicate that the United States population is becoming more ethnically/racially diverse. Presumably, as the overall proportion of non-Whites and/or Hispanics increases, the non-White and/or Hispanic adolescent population will also increase in the United States. According to the U.S. Census Bureau, the percentage of children age 5 and younger from non-White racial or ethnic groups increased from 49% in 2010 to 49.7% in 2011 (U.S. Census Bureau, 2012). Additionally, it was reported that in 2011, 50.4% of children under the age of 1 are from minority backgrounds (U.S. Census Bureau, 2012). One issue that is especially salient for young non-White individuals is that of ethnic identity (Phinney, 2006). As

[1] In terms of the 2010 U.S. Census, it is important to note that Hispanic is not considered to be a race. The 2010 Census definition of "'Hispanic or Latino' refers to a person of Cuban, Mexican, Puerto Rican, South or Central American, or other Spanish culture or origin regardless of race" (U.S. Census Bureau, 2011).

the U.S. becomes ever more ethnically diverse, ethnic identity will become more of a prevalent issue for emerging adults.

This investigation examined ethnic identity in relation to family ethnic socialization, phenotype characteristics, and self-esteem among individuals between 18–24 years of age. Higher levels of ethnic socialization from parents are expected to predict higher levels of ethnic identity in emerging adults. In addition, higher levels of parental ethnic socialization are expected to be positively correlated with higher levels of self-esteem in emerging adults. Higher levels of ethnic identity are expected to predict higher levels of self-esteem. Phenotype characteristics will be examined as a possible moderator of the effects of parental ethnic socialization on ethnic identity.

In the following sections of the thesis, the definition of ethnic identity, theoretical approaches to ethnic identity, measurement issues, and existing literature on ethnic identity development will be reviewed.

Ethnic Identity: Definition

Within the literature on ethnic identity there is a lack of clarity in terms of definitions. Although there is movement towards more clarity and consistency, researchers have used the terms *race* and *ethnicity*, as well as *racial identity* and *ethnic identity*, interchangeably (Cokley, 2007).

For the purposes of this study, the definition of ethnic identity, which is consistent with the definition used by Phinney (1990), will be used. As Cokley (2007) stated, "ethnic identity can be defined as the subjective sense of ethnic group membership that involves self-labeling,

sense of belonging, preference for the group, positive evaluation of the ethnic group, ethnic knowledge, and involvement in ethnic group activities" (p. 225).

For the sake of comparison, the definition of racial identity, as given by Cokley (2007) and used by Helms and Cook (1999) is "the collective identity of any group of people socialized to think of themselves as a racial group" (p. 225). *Race* is a term used to categorize people on the basis of shared physical characteristics, including skin tone and facial features (Cokley, 2007).

Ethnic identity is viewed, from a developmental standpoint, as a process that involves exploring the implications of ethnic group membership as well as understanding and affirming that membership (Ong et al., 2006). Ethnic identity research has its theoretical foundations in Erikson's psychosocial theory of ego identity and Taifel's social identity theory (Phinney, 1989; Umaña-Taylor, Yazedjian, & Bamaca-Gomez, 2004). In the next section, these two influential theories will be described.

Ethnic Identity: Theoretical Approaches

The theoretical foundations of ethnic identity lie in the more general approaches to identity, as theorized by Erikson (1968), Marcia (1966) and Tajfel (1982). This section will provide information on these theoretical approaches to identity before discussing ethnic identity specifically.

Ego Identity Theory

Developing a healthy, coherent sense of identity is one of the central developmental tasks for an individual, according to Erikson's psychosocial theory (Erikson & Erikson, 1998).

Erikson's theory states that over the course of the life span, an individual moves through eight psychosocial stages (Erikson & Erikson, 1998). Each of these stages involves a crisis that must be resolved for the optimal development of an individual. During adolescence, individuals go through the fifth stage, which is characterized by the crisis of identity versus identity diffusion (Erikson, 1980). Writing about ego identity, Erikson stated that the "most obvious concomitants are a feeling of being at home in one's body, a sense of 'knowing where one is going', and an inner assuredness of anticipated recognition from those who count" (Erikson, 1968, p. 165). According to Erikson, identity involves a person's subjective feelings of continuity and sameness (Erikson, 1980). These feelings give a stable sense of self and act as a guide for life choices (Phinney & Ong, 2007).

In order for identity to be achieved, one must go through a process of exploration and commitment (Umaña-Taylor et al., 2004). Exploration refers to "problem-solving behavior aimed at eliciting information about oneself or one's environment in order to make a decision about an important life choice" (Grotevant, 1987, p. 204). Commitment refers to "adherence to a specific set of goals, values, and beliefs" (Schwartz, 2001, p. 11). According to Erikson, one's ego identity is founded on occupational decisions, sexual identity, and ideological values (Kroger, 2003). Erikson characterized adolescents in the midst of the identity stage based on the presence or absence of exploration and commitment (Erikson, 1968). Prior to committing to an identity, an individual may go through a psychosocial moratorium. This is characterized as a period during which the individual engages in exploration of identity options, without making any firm commitments to ideologies or an occupation (Erikson, 1968). Erikson viewed the psychosocial moratorium positively, as it allows for a suitable identity commitment (Erikson,

1968). When an individual does not go through the process of exploration to an adequate extent, problems can arise (Erikson, 1968). One such problem is that of identity foreclosure. This state is the establishment of an identity without a sufficient amount of role experimentation (Erikson, 1968). For example, an adolescent might commit to an identity chosen by his/her parents without first exploring alternative identities or analyzing the chosen identity (Marcia, 1966).

Another state that is not ideal is that of identity diffusion (Erikson, 1968). This state is the antithesis to identity achievement (Marcia, 1966). Identity diffusion is the state of having an incomplete sense of identity (Erikson, 1968). This state is characterized by a sense of confusion about one's identity as a result of failing to resolve the identity crisis; individuals who experience identity diffusion have failed to make a commitment to an identity (Erikson, 1968).

In Erikson's view, one's identity develops "through psychological experiences with the social environment" (Schwartz, 2002, p. 317). Erikson acknowledged that there is cultural diversity in terms of identity development during adolescence and that these variations can influence the development of one's identity (Erikson, 1968). Although cultures vary in terms of the length of time that adolescents are expected to be in the transition from childhood to adulthood, Erikson argued that the majority of societies afford "institutionalized moratoria" to individuals (Erikson, 1968). This state is the time period during development that individuals are not expected to have adult responsibilities and they can experiment with identity roles before they commit to an identity (Erikson, 1968). Erikson, writing in the 1950s, suggested that individuals could be in the moratorium period until they reached the age of 24 (Côté, 2009). Some societies are more structured in terms of the moratoria that are provided (Côté, 2009). Erikson acknowledged that some cultures demand more conformity to adult values and norms,

while other cultures allow more freedom of choice for adolescent members (Côté, 2009). The following text from Erikson (1959, pp. 105-106) elucidates the way that societal variations provide a context within which one's identity development occurs:

> The identity development of an individual is always anchored in the identity of his group; although through his identity he will seal his individual style. Of individual differences we may often not have the fullest perception. Especially in an alien culture we may see somebody going slowly through an identity crisis, in which conformity seems more emphasized than individuality. This very conformity may keep some aspects of the crisis from verbalization or awareness; only closer study could reveal it. Or the individual's experience may seem entirely submerged in rituals and procedures which seem to exaggerate the horror of individual decision and to offer, as a way out, the narrowest choice of models.

In addition to the effect that larger societal factors can have on one's identity formation, Erikson argued that one's social relationships play an important role in shaping one's identity (Erikson & Erikson, 1998). In Erikson's perspective, identity formation occurs "at the intersection of self and society" (Schwartz, 2002, p. 317); thus, social relationships play an important role in identity development. This centrality of relationships is evidenced in Erikson's definition for ego identity: "Ego identity […] is the awareness of the fact that there is a self-sameness and continuity […], the style of one's individuality, and that this style coincides with the sameness and continuity of one's meaning for significant others in the immediate community" (Erikson, 1968, p. 50). According to Erikson, individuals cannot fully know themselves without first experiencing social relationships in both occupational and romantic contexts (Erikson & Erikson, 1998). Hence, it is clear that Erikson held the view that interpersonal relationships play a significant role in identity formation.

Marcia's Operationalization of Ego Identity Theory

Marcia (1966) operationalized Erikson's theory of ego identity development. Marcia extrapolated from Erikson's theory a status typology (Marcia, 1966). Four identity statuses were derived by combining high and low levels of both exploration and commitment (Marcia, 1966). The identity statuses are diffusion, foreclosure, moratorium, and achievement (Marcia, 1966). A person acquires the achieved identity status after going through a process involving a decision-making period and making a firm commitment to self-chosen goals (Marcia, 1980). An individual with a moratorium status is someone who is in an identity crisis; he/she has not made a commitment (Marcia, 1980). An individual with a foreclosed status has made a commitment without going through a decision-making period; their occupational and ideological goals are not self-chosen (Marcia, 1980). A diffuse status is given to a person who may or may not have experienced a decision-making period and has not made a commitment to an identity (Marcia, 1980).

To assess the status construct, Marcia conducted a study on 86 college males (1966). A semi-structured interview was used to examine the presence of crisis (a time when individuals explore identity options) and commitment in terms of occupational choice, political ideology, and religion. Based on those factors, participants were placed in one of the four identity status groups (Marcia, 1966, 1980).

Marcia (1966) reported profiles for each of the four ego identity statuses. Individuals in the identity achievement status group had the highest scores on the Ego Identity Incomplete Sentences Blank (EI-ISB; i.e. the independent measure of ego identity), performed better on the stressful concept attainment task, had self-esteem that was somewhat less vulnerable after being

given negative information about themselves, and scored significantly lower than foreclosed status individuals on a measure to assess authoritarian values (Marcia, 1966).

Individuals in the moratorium status group performed variably on the stressful concept attainment task and resembled the identity achievement status group on other measures (Marcia, 1966).

Individuals in the foreclosed status group subscribed more to authoritarian values than did individuals in the achieved group and as well as all other status groups combined (Marcia, 1966). Their performance on the CAT was poor, compared with identity achieved individuals (Marcia, 1966). Marcia reported that these participants responded to failure on the CAT by maintaining unrealistically high goals rather than moderating those goals (1966). The self-esteem of foreclosed individuals tended to be more vulnerable to negative information, compared to the identity achieved group (Marcia, 1966).

Individuals in the diffusion status group had significantly lower EI-ISB scores than the achieved group, moratorium group, and all other groups combined (Marcia, 1966). They also performed more poorly than achieved individuals on the CAT, but they did not have the lowest scores among the statuses (Marcia, 1966).

Marcia's identity status groups can be described as character types, rather than developmental stages (Schwartz, 2001). Currently, the ego identity literature is lacking in studies that demonstrate a clear developmental sequence for the statuses (Schwartz, 2001). Regardless, it has proven to be useful in empirical research. Marcia's status typology is the basis for over 300 empirical and theoretical publications (Schwartz, 2001) and influenced ethnic identity literature with the work of Phinney (1989). Phinney used Marcia's typology to assign

ethnic identity statuses to ethnic minorities in a seminal study of ethnic identity development (Phinney, 1989). In addition to being influenced by the work of Erikson and Marcia, Phinney incorporated theoretical ideas from Tajfel's social identity theory.

Social Identity Theory

Ethnic identity research has derived, in part, from social identity theory's proposition that a sense of belonging to a group in conjunction with how one feels about that group membership has implications for the development of a sense of identity (Umaña-Taylor et al., 2004). According to Tajfel (1982), social identity is "that part of the individual's self-concept which derives from their knowledge of their membership of a social group (or groups) together with the value and emotional significance attached to that membership" (p. 2).

Social identity theory posits that an individual's group membership can contribute to self-esteem (Tajfel, 1981). One principle of social identity theory is that a positive social identity is something that individuals try to achieve or maintain (Tajfel & Turner, 1979). Another is that a large part of positive social identity is due to comparisons that are favorable between in-groups and out-groups—there must be a positive differentiation or distinction perceived of the in-group in order to have a positive social identity (Tajfel & Turner, 1979). Social identity theory also proposes that in the case that their social identity is not satisfactory, individuals will try to leave their in-group in order to join another group that they perceive to be positively different from out-groups and/or they will attempt to make more positively different their in-group (Tajfel & Turner, 1979).

Maintaining self-esteem is the major motivational factor in terms of why individuals are motivated to have positive evaluations of their in-group, according to Tajfel (Tajfel & Turner, 1979). With regard to ethnic identity, ethnic pride may be developed when ethnic characteristics are valued for distinctiveness (Grant, 2008). Conversely, ethnic denial may occur when an individual psychologically leaves his/her ethnic group as a way to distance him/herself from the negative views of his/her ethnic group (Grant, 2008). Using the work of Erikson, Marcia, and Tajfel as theoretical foundations, Phinney (1989) developed an ethnic identity model.

Phinney's Ethnic Identity Status Model

Phinney's early ethnic identity research sought to develop and empirically support a model of ethnic identity development that was congruent with Marcia's ego identity statuses. Phinney compared earlier models of ethnic identity by Cross (1978), Kim (1981), Arce (1981), and Atkinson, Morten, and Sue (1983). Cross (1978) examined ethnic identity development in a sample of Black college students. Kim (1981) examined ethnic identity development in Japanese-American women. Arce (1981) examined ethnic identity development in a Chicano sample. Atkinson et al. (1983) conceptualized racial/cultural identity development based on a clinical sample.

Phinney (1989) noted that the aforementioned models shared commonalities with Marcia's identity stage model in that each model assumes there is a period of identity crisis involving exploration that leads to an identity commitment and that these factors can lead to an achieved identity. However, the models are incongruent with Marcia's model in that they

assume there is progression through the stages over time (Phinney, 1989). Phinney noted that there was no empirical research to support such an assumption (1989).

In an effort to develop and empirically test a model of ethnic identity formation that is consistent with Marcia's identity statuses and applies across ethnic groups, Phinney collected interview and questionnaire data from 91 American-born tenth graders (1989). Measures were based on those that Marcia used for ego identity research (to determine achieved, moratorium, diffuse, and foreclosed statuses) (Phinney, 1989). The sample was ethnically diverse, consisting of Hispanic, Asian American, Black, and White adolescents (Phinney, 1989). Data from the White participants was not coded for ethnic identity stages because too many of them self-labeled themselves as "American" and could not relate to ethnicity as an identity issue (Phinney, 1989). Phinney reported that the ethnic minority adolescents could be categorized as having an achieved (21.6% of sample), moratorium (23.3% of sample), or unexamined status (55% of sample) in terms of their ethnic identities (1989). With regard to the foreclosed and diffuse status groups which were included in Marcia's model, Phinney was unable to reliably differentiate between the two, which led to the statuses being combined into the unexamined status (Syed & Azmitia, 2008).

Based on the results of her study, Phinney proposed a model for the development of ethnic identity that consists of three stages: unexamined ethnic identity, ethnic identity search (moratorium), and achieved ethnic identity (1990). The achieved ethnic identity stage involves a confident, clear sense of one's own ethnicity (Phinney, 1990). Phinney suggested that as a result of the process of exploration and seeking to understand one's ethnicity, one can develop a deeper understanding of his/her ethnicity and also develop an appreciation for it; this process is what

Phinney refers to as ethnic identity achievement or internalization (Phinney, 1990). The ethnic identity search stage is analogous to Marcia's moratorium status, and involves exploring and seeking to understand ethnicity for oneself in terms of its meaning; this stage may come about as a result of a significant experience that mandates awareness of an individual's ethnicity (Phinney, 1990). An unexamined stage involves a lack of exploration of ethnicity with the possible subtypes of diffusion and foreclosure; this is for individuals who lack exposure to ethnic identity issues. The ethnic identity status model is developmental in nature but not a true stage theory (Phinney, 1989; Syed & Azmitia, 2008). In response to new experiences and opportunities, individuals are expected to move through the statuses from unexamined to moratorium, and then on to achieved; however, because individuals may normatively regress from higher to lower statuses, it is not a stage theory (Phinney & Ong, 2007; Syed & Azmitia, 2008). Phinney's influential model had implications for the measurement of ethnic identity. In the next section, the ways that ethnic identity is commonly assessed will be discussed.

Measurement Approaches

Components of Ethnic Identity

Ethnic identity (EI) is a multidimensional construct. There are differences in ethnic identity measurements across studies and this is often due to differences across measures on the components of EI (Grant, 2008). The following are components of EI that have commonly been assessed: sense of belonging, interest in and knowledge of ethnic group, attitudes toward ethnic group, involvement in ethnic practices, commitment to ethnic group, and self-identification (Grant, 2008).

Sense of belonging refers to the degree to which an individual feels that he/she belongs to an ethnic group (Phinney, 1990). Interest in and knowledge of ethnic group refers to how much an individual knows about his/her ethnic group and the degree to which an individual actively searches for information and knowledge of his/her ethnic group (Grant, 2008). The *attitudes toward ethnic group* component encompasses the terms *group esteem*, *ethnic esteem*, and *collective esteem* (Grant, 2008); positive and negative ethnic group attitudes are assessed (Phinney, 1990). Involvement in ethnic practices is a component of EI that involves participation in social life and cultural practices and includes the following indicators: friendship, religion, cultural traditions, language, and politics (Phinney, 1990). The commitment component of EI refers to "a clear sense of one's ethnic background and its meaning for one's life" (Phinney, 1991, pg. 202). Self-identification refers to the self-chosen ethnic label that one uses in reference to oneself (Phinney, 1990).

Researchers have created measures of EI that vary in terms of the components of EI that are assessed. The most commonly used measure of EI, the Multiethnic Identity Measure (Phinney, 1992), as well as a newer measure, the Ethnic Identity Scale (Umaña-Taylor et al., 2004), examine components based on theories by Erikson (1968), Marcia (1966) and Tajfel (1982). Erikson's and Marcia's work is the theoretical underpinning of the ethnic identity exploration and commitment-related components (Umaña-Taylor et al., 2004). Taifel's social identity theory is linked to the components concerning feelings of affirmation and ethnic group attitudes (Umaña-Taylor et al., 2004). The most commonly used measures will be described below.

Ethnic Identity Measures

Several different measures have been used to assess ethnic identity. Some measures are for general use, while others were created for use with specific ethnic groups (Grant, 2008). The most widely used measure is the Multigroup Ethnic Identity Measure (MEIM; Phinney, 1992). This and other measures in frequent use will be discussed below.

MEIM. The Multigroup Ethnic Identity Measure (MEIM; Phinney, 1992) was created to assess ethnic identity in diverse ethnic groups (Phinney & Ong, 2007). The original MEIM consisted of 20 items and two subscales, Ethnic Identity Achievement and Other-Group Orientation (OGO; Phinney, 1992). Components of ethnic identity that Phinney assumed were common across ethnic groups were assessed with 14 items that examined achieved identity, involvement in ethnic practices, and sense of belonging (Phinney, 1990). Due to the variation of ethnic beliefs and values across groups, these factors were not assessed (Phinney, 1990). Six items assessing OGO were included to contrast the EI items but these were eventually dropped from the MEIM due to OGO being a separate construct (Phinney, 1990). The MEIM underwent additional modifications following empirical research (Roberts et al., 1999).

Using exploratory and confirmatory factor analyses, Roberts et al. (1999) reported that the MEIM consisted of two factors (exploration and commitment) and that two items from the MEIM did not fit the model. Thus, a 12-item version of the MEIM came into use (Phinney, 1990). The exploration component items assess an individual's attempts to gain knowledge about his/her ethnic group as well as the extent to which the individual participates in the cultural practices of the ethnic group (Phinney & Ong, 2007). The commitment component items assess the extent to which a person has a sense of positive affirmation and commitment toward his/her

ethnic group (Phinney & Ong, 2007). The positive affirmation aspect of the measure was influenced by social identity theory, which posits that individuals seek to maintain a positive sense of identity. Additionally, both the exploration and commitment factors of the measure are congruent with Marcia's (1980) conceptualization of identity exploration and commitment (Phinney & Ong, 2007). Each item on the MEIM is a statement that requires respondents to answer using a Likert scale of 1-4 based on how much they agree with each statement (Phinney, 1990). The MEIM is generally used to assess whether ethnic identity has been achieved by averaging all of the measure's items together; the overall score range is 1-4 (Umaña-Taylor et al., 2004). The higher scores indicate more of an achieved ethnic identity (Phinney, 1990).

Different approaches have been used in research with the MEIM (Cokley, 2007). Researchers have sometimes used the 12-item version, the 14-item version, or the original 20-item version of the MEIM, which includes Other-Group Orientation items (Cokley, 2007). This, in addition to the fact that differing statistical analyses of the MEIM have been used across studies, has made it difficult to compare ethnic identity, in terms of structure, across research studies (Cokley, 2007).

Although Roberts et al. (1999) and other scholars (for a review, see Phinney, 1990) have reported a two-factor structure for the MEIM, one study reported a three-factor structure. Exploratory factor analyses by Lee and Yoo (2004) revealed that the MEIM is comprised of exploration, clarity, and pride. According to Phinney and Ong (2007), the clarity and pride factors are comparable to commitment. These measurement issues, in addition to Phinney's construct validity review, led to the creation of the latest version of the measure, the MEIM-Revised (MEIM-R; Phinney & Ong, 2007).

Phinney and Ong (2007) reported on several research steps taken to improve the MEIM. A pilot study was conducted to assess content and face validity and focus groups and interviews were used determine whether items were suitable for diverse minority youths (Phinney & Ong, 2007). Two MEIM items relating to participation in ethnic organizations and cultural practices were deleted because they referred to behaviors rather than an internalized sense of self; ethnic identity is conceptually different than ethnic behaviors, according to Phinney and Ong (2007). Some items were reworded in order to make them apply to the past and the present (Phinney & Ong, 2007). Additionally, the two subscales of exploration and commitment were given equal numbers of items so that each would be weighted equally in analyses (Phinney & Ong, 2007). Research with this revised version of the MEIM on a diverse sample of 192 university students supported a two-factor structure for ethnic identity, comprised of exploration and commitment; each factor has 3 items in the measure (Phinney & Ong, 2007). In terms of scoring, each subscale can be averaged separately, or to determine ethnic identity achievement, the scale can be averaged as a whole (Phinney & Ong, 2007). Of note, the MEIM-R has been suggested by Ponterotto and Park-Taylor (2007) to be an exemplary measure of ethnic identity given the two-factor model's excellent fit to the data in Phinney and Ong's report (2007) that listed an adjusted goodness-of-fit index of .96 and a comparative fit index of .98.

It has been noted in the literature that neither Erikson's nor Phinney's postulations about ethnic identity demand that one have positive feelings toward one's ethnic identity commitment (Cokley, 2007; Umaña-Taylor et al., 2004). Yet, the MEIM assumes that one has a positive commitment to one's ethnic group (Umaña-Taylor et al., 2004). It has been proposed that the issue is in the way the MEIM is used (Cokley, 2007). Cokley (2007) stated that the scoring

method is problematic in that, with the typical use of the MEIM, a total score is calculated by combining the affirmation and achievement items. The fact that positive feelings towards one's ethnic group are indicated by the affirmation items results in an achieved ethnic identity being dependent on having positive feelings towards one's group. According to Umaña-Taylor et al. (2004), use of the MEIM results in a confounding of ethnic identity affirmation and commitment, and it is not consistent with Eriksonian theory. Umaña-Taylor and colleagues (2004) developed a measure to address this inconsistency.

EIS. The 17-item Ethnic Identity Scale (EIS) was created by Umaña-Taylor et al. (2004) as a way to assess ethnic identity exploration, affirmation, and resolution. The authors stated that prior ethnic identity assessments have involved continuous measures that make it difficult to establish how individual outcomes are related to individual ethnic identity components (Umaña-Taylor et al., 2004). In addition to creating a measure that would resolve that issue, the researchers' intent was to develop a measure that was consistent with the theories of Erikson and Tajfel, as well as the identity status framework of Marcia (Umaña-Taylor et al., 2004).

The exploration subscale consists of 7 items and assesses the degree to which individuals have examined their ethnicity (e.g., by participating in ethnic-related activities) (Umaña-Taylor et al., 2004). The EIS's 4 resolution items assess the degree to which one feels that the issues regarding one's ethnicity have been resolved (Umaña-Taylor et al., 2004). The 6-item affirmation subscale assesses whether one has positive or negative affect in terms of their ethnic identity resolution; this allows for consistency with ego identity theory and social identity theory (Umaña-Taylor et al., 2004).

The EIS is a different measurement approach from the MEIM because it is not used as an assessment of overall ethnic identity achievement, but rather as a way to examine the separate components of ethnic identity (Umaña-Taylor et al., 2004). In other words, rather than simply assessing relationships between identity achievement and outcomes, the EIS allows for a more fine-grained examination of ethnic identity—researchers use it to examine how each EI component (i.e., exploration, affirmation, and resolution) is related to other variables (Umaña-Taylor et al., 2004).

In terms of the development of the EIS, Umaña-Taylor and colleagues used scholars in focus groups to generate a list of 46 items relating to exploration, commitment, and affirmation (2004). Next, a diverse undergraduate sample (n=615) was used to conduct exploratory factor analyses (Umaña-Taylor et al., 2004). Umaña-Taylor et al. (2004) reported a three-factor solution explaining 49% of variance. The measure was reduced to 22 items representing the three subscales of exploration (7 items), affirmation (6 items), and resolution (9 items) (Umaña-Taylor et al., 2004). The scholars conducted confirmatory factor analyses and, after subsequently examining the standardized residual matrix, discarded 5 items ((Umaña-Taylor et al., 2004). The 17-item version yielded an acceptable fit to the data, with a CFI of .91 and a GFI of .86 (Umaña-Taylor et al., 2004). Reliability testing yielded coefficient alphas of .91, .86, and .92 for exploration, affirmation, and resolution, respectively (Umaña-Taylor et al., 2004). K-means cluster analysis was used to determine cut-off scores for the purpose of assigning participants into Marcia's (1966) 4 statuses (i.e. Diffusion, Moratorium, Foreclosed, and Achieved); each status has a negative and positive affirmation version, resulting in 8 total typologies (Umaña-Taylor et al., 2004). Umaña-Taylor and colleagues (2004) used this final

model on a sample of 231 ethnically diverse high school students. Coefficient alphas in this study were .89, .83, and .89 for exploration, affirmation, and resolution, respectively (Umaña-Taylor et al., 2004).

There is empirical support for the measure's construct validity, as demonstrated by Umaña-Taylor et al's (2004) preliminary analyses. It was reported that university students who scored low on a measure of family ethnic cultural socialization also scored low on ethnic identity exploration and resolution (Umaña-Taylor et al., 2004). Additionally, consistent with the measure's foundations in Erikson's and Tajfel's theories, it was reported that individuals who scored highest on a measure of self-esteem also reported higher levels of ethnic identity exploration and ethnic identity resolution and had positive ethnic identity affirmation (Umaña-Taylor et al., 2004). Additional evidence for the measure's construct validity was reported by Yoon (2011). Yoon (2011) examined the EIS and the MEIM among a college student sample. In Yoon's (2011) study, confirmatory factor analyses supported the three-factor structure of the EIS (consisting of exploration, resolution, and affirmation). Convergent validity was evidenced by Yoon (2011) who reported that MEIM-R and EIS scores were significantly and positively correlated.

The current investigation used the EIS to assess the ethnic identity components of exploration, resolution, and affirmation. The EIS was used in order to maintain congruency with the methods of Gonzales-Backen and Umaña-Taylor (2011) for the purpose of study replication. Rather than examine ethnic identity achievement with a measure such as the MEIM, Gonzales-Backen and Umaña-Taylor (2011) used the EIS to examine the differential effects of a predictor

variable on the individual components of ethnic identity. The current investigation took a similar approach.

In addition to using measures created specifically for the assessment of ethnic identity, scholars have used revised versions of racial identity measures to assess ethnic identity. One measure that has been used, the Multidimensional Inventory of Black Identity (MIBI), is described below.

MIBI. The Multidimensional Inventory of Black Identity (MIBI) is a 56-item racial identity measure that has been used to assess ethnic identity (Sellers, Rowley, Chavous, Shelton, & Smith, 1997). It was created specifically for use with Black Americans but it has been modified for use with other groups (Grant, 2008). The MIBI consists of three scales: centrality, regard and ideology (Sellers et al., 1997). The 8 centrality items measure to what extent ethnicity is a central part of one's self-concept. The 12 regard items assess private and public regard. Private regard refers to the degree to which one has positive feelings toward their ethnic group. Public regard items assess the degree to which one believes African Americans are viewed negatively or positively by others. The 36 ideology items assess ideas about how members of one's ethnic group should behave in various contexts; there are 4 ideology subscales, including nationalist, minority, assimilation, and humanist (Sellers et al., 1997). Scholars who have utilized the MIBI in ethnic identity research have generally used the centrality and regard scales to assess ethnic identity (Kiang, Witkow, Baldelomar, & Fuligni, 2010).

The MIBI was created to assess multiple dimensions of racial identity in African Americans (Sellers et al., 1997). Sellers and colleagues (1997) based the MIBI on the

Multidimensional Model of Racial Identity, which includes the racial identity dimensions of centrality, ideology, and regard. The original MIBI consisted of 71 items and was used with a sample of 474 African American university students in a study to assess validity and reliability (Sellers et al., 1997). After reviewing the results from factor analyses, Sellers and colleagues (1997) revised the MIBI to include 51 items. The authors reported evidence for construct validity, predictive validity, and 6 measure subscales including Centrality, Private Regard, and 4 ideology subscales (i.e. Assimilation, Humanist, Nationalist, and Oppressed) (1997). Later measurement refinements led to an internally consistent Public Regard subscale and the current version of the measure consists of 56 items (Cokley & Helm, 2001; Sellers, Smith, Shelton, Rowley, & Chavous, 1998). The next section will discuss empirical research on ethnic identity development.

Empirical Evidence of Ethnic Identity Development

Relatively few studies have examined the development of ethnic identity longitudinally, whereas cross-sectional designs are common within the literature (French, Seidman, Allen, and Aber, 2006). Be that as it may, both cross-sectional and longitudinal research has empirically supported the idea that during adolescence ethnic identity exploration is normative (Quintana, 2007). French et al. (2006) conducted a longitudinal study to examine the developmental course of ethnic identity over two important transitional periods during adolescence, early and middle adolescence; 258 early adolescents and 162 middle adolescents made up the sample. French and colleagues (2006) also investigated whether there are similar patterns of ethnic identity across African-American, European-American, and Latino-American ethnic groups. Additionally,

group self-esteem and exploration were examined; patterns of change were examined and compared for different time frames. Each ethnic identity aspect was examined longitudinally over short and long time frames. Changes in group self-esteem and exploration were examined during the transitional first year of junior and senior high school and these patterns were compared to those of the first two years of each school type (French et al., 2006). In this study, group self-esteem was defined as a dimension of ethnic identity development and refers to "how one feels about being a member of one's racial or ethnic group" (French et al., 2006, p. 4). The authors noted that group self-esteem is not identical to group commitment, but that the two dimensions are correlated. Exploration, the second dimension of ethnic identity, was defined as "how much an individual tries to find out what it means to be a member of one's racial or ethnic group" (French et al., 2006, p. 4).

After analyzing the early adolescents, French et al. (2006) reported that, over time, there was a significant change in ethnic identity, and the change differed by ethnic group. In terms of the dimensions of ethnic identity, they reported that for the early adolescents, there was a significant increase in group self-esteem but not exploration over time (French et al., 2006). The Latino-Americans and African-Americans, when compared to the European-Americans, had a greater increase in group self-esteem over time. There was also a significant increase in group self-esteem during the transitional first year of junior high school compared to the first two years of junior high school, which suggests an effect of the transition from elementary school to junior high school on the development of group self-esteem (French et al., 2006).

An analysis of the middle adolescents showed a significant increase in ethnic identity over time (French et al., 2006). For this group, both group self-esteem and exploration

significantly increased over time. In terms of the differences between the dimensions, exploration rose consistently over time while group self-esteem , although it did increase over time, increased more during the first year of high school than when compared to the first two years of high school. Comparisons between the ethnic groups showed that African-American and Latino-American students increased only slightly more than European-Americans (French et al., 2006).

This study provides empirical support for Phinney's three-stage model of ethnic identity development. The study reported that exploration increased significantly during middle adolescence but not during early adolescence. This is consistent with Phinney's model. Phinney proposed that during adolescence, ethnic identity becomes a salient issue; presumably, early adolescents would have lower levels of ethnic identity exploration than older adolescents. Based on this study, it appears that middle adolescence is an important time for ethnic identity exploration. Although French et al. (2006) did not assign Phinney's stages to the adolescents, it would seem that the early adolescents could be classified with the unexamined stage due to their lack of exploration over time. The middle adolescents, due to their significant increase in exploration over time, could be classified with the moratorium stage. A noteworthy aspect of this study is that the elementary schools and junior high schools were ethnically homogeneous while the high schools were ethnically heterogeneous (French et al., 2006). It has been found that change in ethnic composition from junior to senior high school predicts increased exploration (French et al., 2006). This correlates with what French and others (2006) found, with middle adolescents reporting higher levels of exploration over time (after transitioning to an ethnically diverse high school) and the early adolescents, who transitioned to an ethnically

homogeneous school from a similarly composed school, reporting no significant increase over time. This is congruent with the suggestion by Phinney and others (1990) that ethnic identity exploration may be initiated when an individual has increased contact with others with backgrounds differing from their own.

Pahl and Way (2006) conducted a longitudinal investigation on the developmental trajectories of ethnic identity. This study included 135 Black and Latino middle and late adolescents. Pahl and Way (2006) investigated how the trajectories differed according to gender, ethnicity, level of perceived discrimination by peers/adults, and immigrant status. Using Phinney's model as a basis, they expected that levels of exploration would rise and then stabilize during late adolescence as more confidence in identities emerge; additionally, feelings of belonging and affirmation were expected to increase from middle to late adolescence (Pahl & Way, 2006). These researchers looked specifically at dimensions of ethnic identity (exploration and belonging/affirmation) as opposed to the groups described by Phinney.

In terms of their significant findings, Pahl and Way (2006) reported that Black adolescents experienced less deceleration of exploration from middle to late adolescence than do Latinos. According to the authors, this may be due to more than one factor. Institutional and cultural racism that Black Americans face may play a role in Black adolescents experiencing less deceleration of exploration (Pahl & Way, 2006). In support of this, they reported that the strongest association with exploration among Black adolescents was perceived discrimination by peers (Pahl & Way, 2006). Additionally, Pahl and Way (2006) found that for all adolescents, less deceleration of exploration over time was predicted by mean perceived discrimination. Another factor that may explain the exploration difference between Latinos and Blacks is that the

Latinos were in a school and community that consisted of a Latino majority (2006). This may have resulted in them experiencing less of a need to question the implications and meanings of their ethnicity, and, thus, a greater decrease in exploration over time (Pahl & Way, 2006).

The researchers found no significant differences related to gender or immigrant status (2006). However, they found that exploration was associated with perceived discrimination by peers (Pahl & Way, 2006). Perceived discrimination by peers predicted less deceleration of exploration over time; however, it did not predict initial levels of exploration at Time 1 to be higher (Pahl & Way, 2006). Affirmation levels were continuously high for both Black and Latino adolescents. The authors suggest that African-American history and efforts to instill racial pride among Blacks are responsible for high levels of affirmation in the Black participants (Pahl & Way, 2006). In terms of the high levels of affirmation found among the Latino students, the authors suggest that this was due to the students being members of the ethnic majority group in their schools as well as their feelings of social support (Pahl & Way, 2006). Pahl and Way's study suggests that the course of ethnic identity development among the Black and Latino groups is moderated by perceived discrimination by peers and ethnicity (2006).

Pahl and Way's (2006) research findings correlate with Phinney's model of ethnic identity formation by showing that there are decelerating levels of exploration during late adolescence. However, in contrast to what the authors expected based on developmental theory, there was no average growth pattern found for affirmation.

Researchers have employed different methodologies for studying ethnic identity. Syed and Azmitia (2008) took a narrative approach with a goal of testing the ethnic identity development model with an ethnically diverse group of 191 emerging adults. The ethnic groups

that were included were Asian-American, Latino, mixed-ethnicity, and White (Syed & Azmitia, 2008). A major goal of this study was to examine narrative themes drawn from the participants' ethnicity-related experiences; also, the researchers sought to determine whether the ethnic identity statuses "provide a developmental lens for selecting and interpreting" ethnic experiences (Syed & Azmitia, 2008). Syed and Azmitia (2008) used the Multigroup Ethnic Identity Measure (MEIM; Phinney, 1992) to index ethnic identity. Syed and Azmitia (2008) found evidence supporting the ethnic identity status model among emerging adults. Using cluster analysis from the data obtained with the MEIM, Syed and Azmitia (2008) found clearly interpretable clusters: an achieved group (42 participants), a moratorium group (81 participants), and an unexamined group (68 participants). The results were congruent with past research and theory (Syed & Azmitia, 2008).

In terms of narrative theme assessment, the researchers asked each participant to recount an event in which they became aware of their ethnicity when in the company of a close friend. The measure was a written narrative questionnaire. For the purpose of coding, a subsample of 40 participants was used to identify prevalent themes within the narratives (Syed & Azmitia, 2008). A diverse group of narrative interpreters reviewed the interview transcripts and came to a consensus on four narrative themes (Syed & Azmitia, 2008). Based on these, one of the authors developed a coding manual that was used for coding all of the data (Syed & Azmitia, 2008).

The narrative themes that occurred most frequently were connection to culture/ethnicity (11.5%), awareness of underrepresentation (11.5%), awareness of difference (25%), and experience of prejudice (46%) (Syed & Azmitia, 2008). It was found that the average age of the event experienced was 15.01 years, but that the age of the event was associated with the theme

(Syed & Azmitia, 2008). The average age of event when stories had an awareness of difference theme was 13.19 years old, which is significantly lower than the mean ages associated with the other themes (Syed & Azmitia, 2008). Phinney's model suggests that adolescence is the period in which an individual may experience an awareness of ethnicity (Phinney, 1990) and these results are consistent with that. Syed and Azmitia (2008) reported that the prevalence of the awareness of underrepresentation and awareness of difference themes decreased as ethnic identity statuses progressed from unexamined to moratorium to achieved. The theme of connection to culture was more prevalent in the achieved group than in the other groups (Syed & Azmitia, 2008). This theme correlates with Phinney's model, that suggests when individuals reach the achieved status, they develop an appreciation and understanding of their ethnicity and they achieve ethnic identity internalization (Phinney, 1990). In addition to empirical support for ethnic identity development, the literature suggests that ethnic identity is associated with numerous outcomes; these will be examined in the following section.

Outcomes Associated with Ethnic Identity

Empirical research has found associations between ethnic identity and a variety of outcomes including academic achievement (Altschul, Oyserman, & Bybee, 2006), family respect and obligation (Kiang & Fuligni, 2009), and social adjustment (Kalsner & Pistole, 2003), to name a few. A great deal of the research has focused on mental health outcomes, both positive and negative.

In a two-year longitudinal study, Seaton, Scottham, and Sellers (2006) sampled 224 African American adolescents in order to examine whether the racial-ethnic identity statuses that

were proposed by Phinney (1990) are associated with psychological well-being. At the first data collection, the adolescents ranged in age from 11-17 years; the average age was 14 (Seaton et al., 2006). Seaton and colleagues used the MEIM (Phinney, 1992) to assess racial-ethnic identity and The Center for Epidemiological Studies—Depression Scale to assess depression. The Psychological Well-being Scale was used to assess well-being; this measure includes the dimensions of self-acceptance, autonomy, positive relations with others, purpose in life, environmental mastery, and personal growth (Seaton et al., 2006).

The researchers reported that at the first time point, compared to diffuse individuals, achieved, moratorium, and foreclosed individuals scored higher on the measure of psychological well-being (Seaton et al., 2006). At the study's second time point, fewer depressive symptoms were reported by individuals with an achieved status than those with a diffuse status (Seaton et al., 2006). Seaton et al. (2006) also found that more depressive symptoms were reported by moratorium and diffuse individuals than by foreclosed individuals. Data from Time 2 indicated that diffuse individuals had the lowest levels of well-being, and that achieved individuals had the highest levels (Seaton et al., 2006). After post hoc analyses, it was revealed that individuals whose identity statuses remained constant reported levels of well-being that were higher than those of adolescents who experienced a regression in status (Seaton et al., 2006). Indeed, the literature widely supports the view that ethnic identity is linked to psychological well-being.

Smith and Silva (2011) investigated the relationship between ethnic identity and well-being among non-Whites in North America in a meta-analysis that included 184 studies. The average age of participants was 22.9 years and the ethnic groups included African-Americans (33%), Asian Americans (35%), Hispanic/Latino Americans (21%), Native Americans (5%),

Pacific Islander Americans, (1%), and "other" non-Whites (5%) (Smith & Silva, 2011). The total sample size was 41,626 (Smith & Silva, 2011). Smith and Silva (2011) reported that the average effect size across all studies was $r = .17$; the range was between -.18 and .57. Upon closer examination it was found that ethnic identity was consistently linked to well-being and self-esteem measures; however, it was not as strongly associated with mental health symptoms like anxiety and depression (Smith & Silva, 2011). The effect sizes from studies examining well-being and self-esteem were of average size and larger than those from studies that examined mental health symptoms and personal distress (Smith & Silva, 2011).

Perhaps because of its consistent linkages with ethnic identity, the self-esteem construct is the most widely researched outcome measure in the ethnic identity literature (Grant, 2008). Studies have found significant positive correlations between self-esteem and ethnic identity in several populations (Grant, 2008). These include Hispanic Americans, African Americans, Asian Americans, Puerto Ricans, Dominicans, Whites, bi-ethnic youth, and ethnic minority youth both in and outside of the United States (Grant, 2008). Due to the fact that ethnic identity has been so frequently associated with self-esteem, this investigation will examine the construct as an outcome measure. The literature also suggests a robust relationship between ethnic identity and ethnic socialization; this construct will be discussed in the following section.

Ethnic Socialization

Research has attempted to establish factors that influence the development of ethnic identity. There is strong evidence that ethnic identity is affected by family ethnic socialization (Hughes et al., 2006). Family ethnic socialization (FES) can be defined as the messages about

ethnicity that parents transmit to their children in order to highlight cultural heritage and overcome obstacles associated with being a member of a particular ethnic group (Huynh & Fuligni, 2008). These messages are communicated to children by a range of parental practices. Family ethnic socialization is found in majority and minority ethnic groups; however, for ethnic minority parents, it is a central feature of parenting (Hughes, Witherspoon, Rivas-Drake, & West-Bey, 2009).

FES is comprised of many different parenting practices; a prominent framework for FES includes four dimensions for categorizing FES practices (Hughes, et al., 2008). According to Hughes and colleagues (2008), FES practices fall within the following dimensions: *cultural socialization, preparation for bias, egalitarianism,* and *promotion of mistrust.* These facets of FES will now be reviewed.

Cultural Socialization

Practices that fall under *cultural socialization* (CS) are those that communicate messages about ethnic heritage and history to children, as well as those that promote cultural traditions and ethnic pride (Hughes et al., 2006). Cultural socialization occurs both explicitly and implicitly and is the most frequently occurring type of FES (Hughes et al., 2008). Cultural socialization is the most commonly researched dimension among studies examining ethnic identity as an outcome (Hughes et al., 2006). Parents culturally socialize their children in a variety of ways; a few examples include exposing children to media pertaining to their own ethnic group (e.g., a film or book), speaking native languages to children, and exposing children to ethnic traditions (e.g., cultural dances) (Hughes et al., 2008).

The literature indicates a robust positive relationship between cultural socialization and ethnic identity (Umaña-Taylor et al., 2006; see Hughes et al., 2006, for a review). Psychological adjustment and academic outcomes have been investigated, as well. Hughes, Witherspoon, Rivas-Drake, and Bey (2009) examined ethnic-racial socialization messages and behavioral and academic outcomes among African American and White early adolescents. Their sample of 805 (57.8% White, 49.4% female) 4th- through 6th-graders attended middle-class ethnically diverse schools (Hughes et al., 2009). Hughes and colleagues (2009) investigated cultural socialization, preparation for bias messages (see results regarding this dimension in a later sub-section), ethnic affirmation, self-esteem, academic efficacy, and academic engagement. With regard to their findings on cultural socialization, the scholars reported that higher levels of CS were positively associated with academic efficacy; the relationship was still significant, yet reduced, when ethnic affirmation and self-esteem were controlled (Hughes et al., 2009). Higher CS was positively associated with higher levels of self-esteem and ethnic affirmation (Hughes et al., 2009). CS was directly and indirectly associated with academic engagement. Higher CS was positively associated with higher academic engagement (Hughes et al., 2009). Also, higher CS was positively associated with higher ethnic affirmation and self-esteem, and each of these were positively associated with academic engagement. In terms of their findings on behavioral outcomes, Hughes et al. (2009) found that CS was indirectly associated with antisocial behavior; lower antisocial behavior was reported among students with higher levels of self-esteem and ethnic affirmation. Other scholars have examined mediators in the relationship between FES and outcome measures.

Rivas-Drake (2011) sampled 227 Latino college students to test a mediated model of FES. The sample's average age was 19.4 years and 65% were female. Rivas-Drake (2011) examined relationships between cultural socialization, preparation for bias, self-esteem, depressive symptoms, physical symptoms, ethnic public regard, ethnic centrality, and perceived barriers to opportunity. Consistent with previous research, Rivas-Drake (2011) reported a significant positive association between cultural socialization and self-esteem among Latino college students. This relationship was also significantly mediated by ethnic centrality; however, the direct path remained significant (Rivas-Drake, 2011). Significant negative associations were found between CS and depressive symptoms and physical symptoms (including aches and pains, fatigue, heart-pounding, and nausea) (Rivas-Drake, 2011).

Egalitarianism

Practices that fall under the *egalitarianism* dimension communicate messages about racial equality, the value of different racial and ethnic groups, and the importance of individual qualities rather than racial or ethnic group membership (Hughes et al., 2008). This form of FES has been consistently found among parents from majority and minority ethnic groups and is the second most frequently occurring type of FES (Hughes et al., 2008). Egalitarian practices include parents exposing children to ethnic and racial diversity (e.g., choosing certain schools) and explicit discussions with children about egalitarian values (Hughes et al., 2008).

There is a dearth of research examining outcomes associated with egalitarianism (Hughes et al., 2006). Scholars have suggested that egalitarian messages communicated to children may result in children developing unrealistic expectations in terms of intergroup relations (Hughes &

Chen, 1999). However, Banerjee, Harrell, and Johnson (2011) found evidence of a positive outcome associated with egalitarianism. In a study on racial-ethnic socialization, parental involvement in education, academic achievement, and cognitive performance, Banerjee and colleagues analyzed data from 92 African-American child-parent dyads. Cultural exposure (i.e., parental willingness to expose children to different cultural and ethnic groups) had a significant positive relationship with academic achievement. The authors also reported a significant interaction between high parental involvement and high cultural exposure such that, over time, it predicted increased passage comprehension (Banerjee et al., 2011). Unlike the Banerjee et al. (2011) study, the majority of studies in the FES literature do not exam the egalitarianism dimension. Child outcomes associated with egalitarian socialization is an area in need of empirical research (Hughes et al., 2006).

Preparation for Bias

Preparation for bias (PFB) practices are those that promote awareness of discrimination and proactive strategies to cope with discrimination experiences (Hughes et al., 2006). This is the third most frequently occurring form of FES among families (Hughes et al., 2008). Most often, this type of FES is in the form of discussions between parents and children about unfair treatment based on ethnic group membership and how to handle the discrimination (Hughes et al., 2008). These types of discussions can be proactive, occurring before a discrimination experience, or reactive, occurring after an experience of discrimination (Hughes et al., 2008).

In the previously described Hughes et al. (2009) study, it was reported that the association between PFB and academic efficacy was fully mediated by ethnic affirmation and

self-esteem. PFB was negatively associated with both ethnic affirmation and self-esteem, and each of these were negatively associated with academic efficacy (Hughes et al., 2009). The relationship between PFB and academic engagement was similarly indirect through self-esteem and ethnic affirmation; PFB was negatively associated with both self-esteem and ethnic affirmation and each of these were negatively associated with academic engagement (Hughes et al., 2009). In terms of antisocial behavior, Hughes and others (2009) found a significant direct effect for PFB; there was also a significant, but small, indirect relationship through lower self-esteem and lower ethnic affirmation.

In the previously described study on Latino college students (Rivas-Drake, 2011), PFB was positively associated with depressive symptoms. Rivas-Drake (2011) discovered a mediated relationship between PFB and self-esteem through ethnic public regard and language barriers to opportunity. Higher levels of PFB were associated with lower levels of public regard and increased levels of perceived language barriers to opportunity and both of these were associated with low self-esteem (Rivas-Drake, 2011).

Promotion of Mistrust

The least frequently occurring FES practices among families are those that are classified as *promotion of mistrust* (Hughes et al., 2008). These practices promote distrust and wariness in members of different ethnic or racial groups (Hughes et al., 2006). These messages are transmitted explicitly in cautions about members of other ethnic groups, or indirectly when a child overhears a parent's side-comment or a comment made in jest that highlight negative beliefs about other ethnic groups (Hughes et al., 2008). Parents who score high on measures of

this type of FES also tend to encourage their children to have friends of the same ethnicity (Hughes et al., 2008).

As with egalitarian socialization messages, the literature is in short supply of studies examining outcomes linked to promotion of mistrust messages (Hughes et al., 2008). In a diverse sample of Mexican, Chinese, and European American adolescents, Huynh and Fuligni (2008) found that promotion of mistrust was negatively associated with grade point average in all ethnic groups. The sample included 524 11th-grade students from ethnically diverse schools (Huynh & Fuligni, 2008). A study by Tran and Lee (2010) also found negative outcomes associated with this FES dimension. The authors reported that promotion of mistrust is negatively associated with social competence in Asian American late adolescents (Tran & Lee, 2010). The sample included 169 undergraduate university students with an average age of 18.5 years (Tran & Lee, 2010). Other research suggests that this form of FES may be associated with negative behavioral and cognitive outcomes, but in a complex way.

In Caughy, Nettles, O'Campo, and Lohrfink's (2006) racial socialization study on African American children, those with parents who reported higher levels of promotion of mistrust messages had significantly higher levels of internalizing and externalizing behavioral problems and lower receptive language skills, but these relationships were moderated by neighborhood characteristics. The sample for this study included 241 African American 1st-graders living in urban neighborhoods (Caughy et al., 2006). Caughy et al. (2006) found a significant positive relationship between promotion of mistrust messages and a negative neighborhood social climate. Additionally, promotion of mistrust occurred less frequently among families living in primarily European American neighborhoods (Caughy et al., 2006).

Among children living in neighborhoods characterized by higher levels of fear of retaliation/victimization and social/physical disorder, lower receptive language skills were associated with promotion of mistrust (Caughy et al., 2006). The positive relationship between promotion of mistrust and internalizing problems (e.g., depression and anxiety) was exacerbated in neighborhoods with lower levels of social capital (Caughy et al., 2006). Also, higher levels of child aggressive behaviors were associated with promotion of mistrust but only in neighborhoods with a low negative social climate (Caughy et al., 2006). Clearly, outcomes associated with promotion of mistrust involve a complex network of contextual factors. This area of the FES literature is in need of additional empirical research.

Some FES studies examined all of the aforementioned dimensions and some focused on one or a few (Hughes et al., 2006). Because it is the case that cultural socialization is the most commonly researched dimension of FES in conjunction with ethnic identity (Hughes et al., 2006), cultural socialization was examined in the current investigation. In addition to examining the direct relationship between family ethnic cultural socialization (FECS) and ethnic identity, this investigation tested whether the relationship between FECS and self-esteem is mediated by ethnic identity.

FECS has been consistently found to be positively associated with ethnic identity in studies that utilize composite scores of ethnic identity (Gonzales-Backen & Umaña-Taylor, 2011; Hughes et al., 2009). However, researchers who have examined individual components of ethnic identity (i.e., exploration, resolution, and affirmation) have not found that FECS is significantly associated with each one (Supple, Ghazarian, Frabutt, Plunkett, & Sands, 2006; Umaña-Taylor et al., 2004). Supple et al. (2006) and Umaña-Taylor et al. (2004) both reported

that FECS was not significantly associated with ethnic identity affirmation, yet it was significantly and positively associated with both ethnic identity exploration and resolution. For this reason, the current investigation investigated linkages between cultural socialization and three components of ethnic identity (exploration, resolution, and affirmation). The literature suggests that contextual factors might be involved in the non-significant findings regarding FES and ethnic identity affirmation. This investigation attempted to further this line of research by examining the role of physical appearance along with cultural socialization and ethnic identity.

Physical Appearance

Developmental theorists have argued that there is a need for research that takes into consideration the context within which development occurs (Bronfenbrenner, 1989; García Coll et al., 1996). With regard to racial and ethnic minority populations, García Coll and others (1996) asserted that factors salient to children in these groups may influence their development. As suggested by García Coll and colleagues (1996), physical characteristics (i.e., skin color and racial features) may shape developmental outcomes.

From a social identity theory perspective, it would be plausible that physical appearance is associated with ethnic identity due to social categorization. To quote Tajfel (1974), social categorization is "a system of orientation which creates and defines the individual's own place in society" (p. 69). According to Tajfel, social categorization only occurs when there are other social groups within society to compare to. That is, "a group becomes a group in the sense of being perceived as having common characteristics or a common fate only because other groups are present in the environment" (Tajfel, 1974, p. 72). Group characteristics such as status and

skin color (i.e., ethnic appearance) are significant owing to perceived differences from other groups as well as the value associated with the characteristics (Tajfel, 1974). Based on these theoretical assumptions, it could be posited that ethnic appearance plays a role in the development of ethnic identity. If one is treated as a member of a particular ethnic group or is expected to behave as a member of a particular ethnic group based on one's physical appearance, that may influence the extent to which one feels positively or negatively about one's membership in an ethnic group. It could influence the extent to which one is likely to internalize messages regarding ethnicity that are transmitted by family members. Effects associated with ethnic phenotypic features have not been studied fully (García Coll et al., 1996). Nevertheless, there exists empirical evidence supporting the idea that physical appearance can play a role in shaping one's identity as well as one's psychological well-being. This section will review some of the research that concerns ethnic identity and physical appearance.

The literature on racial identity contains studies reporting linkages between physical appearance and racial identification. For example, Khanna (2004) investigated factors that influence racial identity among bi-racial Asian adults living in the United States. The author reported that the most important factor predicting participants' self-chosen racial categorizations was phenotype—this factor was measured by asking participants how they thought others perceived their looks (Khanna, 2004). Asian-whites were found to be twice as likely to identify themselves as Asian rather than non-Asian when they believed that others perceived them to look Asian (Khanna, 2008). Golash-Boza and Darity (2008) analyzed Latino/a racial choices and found that, compared to darker-skinned Latinos/as, lighter-skinned Latinos/as were more likely to self-identify as being "white" as opposed to "black" or "other." Although these studies did

not investigate ethnic identity, they demonstrate that phenotype has a relationship with at least the racial facet of identity. The remainder of this section will focus on studies that have examined ethnic identity in relation to physical appearance.

To date there have been relatively few published studies on the roles that physical characteristics may play with regard to ethnic identity. Germane to the current investigation, this author has found only one study that examined both ethnic identity and ethnic socialization in connection with physical characteristics. Studies in the ethnic identity literature point to the importance of identifying moderating factors in this line of research. There is evidence that ethnic identity plays a moderating role in connection with phenotypic features and psychological outcomes. Furthermore, relations between ethnic identity and other variables may also be moderated by physical features.

Kiang and Takeuchi (2009) investigated associations between ethnic identity, phenotypic characteristics, and psychological distress among a sample of 2,092 Filipino American adults. Using self- and observer reports, the researchers measured both skin tone and physical characteristics; a six-point Likert scale was used to describe participants' physical characteristics to determine the degree to which they appeared to have more Filipino or more European physical characteristics (Kiang & Takeuchi, 2009). Kiang and Takeuchi's (2009) results indicated that ethnic identity, as measured by the MEIM (Phinney, 1992), plays a moderating role in the relationship between physical characteristics and psychological distress. For females, it was found that those who had fewer Filipino features had higher levels of psychological distress, but only when they also had low levels of ethnic identity (Kiang & Takeuchi, 2009). Although there were no significant interactions found for males, lower levels of psychological distress were

reported in those with darker skin; males also reported lower levels of psychological distress when they had higher levels of ethnic identity (Kiang & Takeuchi, 2009).

Another study that also examined a psychological outcome in association with ethnic identity and physical appearance was conducted by Lopez (2008). This study used an adult female Puerto Rican-American sample (n=53) (Lopez, 2008). In line with other research, Lopez (2008) reported a significant positive relationship between ethnic identity (measured with the MEIM; Phinney, 1992), and self-esteem, as measured by the Rosenberg Self-Esteem Scale (Rosenberg, 1965). As was hypothesized by the author, no significant direct relationship between skin color and self-esteem was found (Lopez, 2008). The highest levels of self-esteem in the sample were found among lighter-skinned women who had higher levels of ethnic identity (Lopez, 2008). Likewise, yet to a lesser extent, higher self-esteem was associated with higher ethnic identity among the darker skinned participants (Lopez, 2008). Again, ethnic identity appears to play the role of moderator in the relationship between physical appearance and psychological outcome. Although this investigation's findings, as well as those reported by Kiang and Takeuchi (2009), may not generalize to other ethnic groups, they do support the argument by García Coll et al. (1996) that contextual factors should be considered in ethnic minority research. Along this line of thinking, a few researchers have examined the extent to which physical appearance moderates the relationship between ethnic identity and ethnic socialization.

Gonzales-Backen and Umaña-Taylor (2011) sought to explain why previous research on Latinos had failed to find a correlation between ethnic identity affirmation and family ethnic cultural socialization (FECS), given that positive correlations were found between FECS and

both EI exploration and EI resolution (Umaña-Taylor et al., 2004). Gonzales-Backen and Umaña-Taylor (2011) sampled 167 Latino adolescents with a mean age of 18.2 years. Ethnic identity was measured by the Ethnic Identity Scale (Umaña-Taylor et al., 2004). Familial ethnic socialization was measured by the Familial Ethnic Socialization Measure (Umaña-Taylor et al., 2004). Participants' color yearbook photographs were coded for the following three indices of physical characteristics: skin color, Latino appearance, and European appearance.

Gonzales-Backen and Umaña-Taylor (2011) reported that all three indices of physical appearance significantly moderated the relationship between EI affirmation and FES. Among the adolescents with darker skin, there was a positive correlation between EI affirmation and FES. In contrast, no such correlation was found among the lighter-skinned adolescents (Gonzales-Backen & Umaña-Taylor, 2011). The individuals who reported high levels of FES and who were also rated lower on European appearance had higher levels of EI affirmation. The relationship between FES and EI affirmation was not significant for individuals rated as looking more European (Gonzales-Backen & Umaña-Taylor, 2011). In terms of Latino appearance, among those adolescents rated as having a more Latino appearance, there was a positive correlation between FES and EI affirmation. The relationship between FES and EI affirmation was not significant for individuals rated as looking less Latino (Gonzales-Backen & Umaña-Taylor, 2011). The interaction effect sizes were small: R^2 *Change* = .05, .04, and .04 for Latino appearance, European appearance, and skin color, respectively (Gonzales-Backen & Umaña-Taylor, 2011).

As the authors expected, physical appearance, which varies within the pan-ethnic Latino group, interacted with familial socialization processes and influenced ethnic identity (Gonzales-

Backen & Umaña-Taylor, 2011). It would seem that for Latino adolescents whose physical characteristics are in line with a Latino identity (i.e., darker skin color), the ethnic socialization messages received from parents are more likely to be internalized, resulting in more positive feelings toward their ethnicity (Gonzales-Backen & Umaña-Taylor, 2011). To this author's knowledge, this study is the only study in the published literature that has investigated ethnic identity, ethnic socialization, and physical appearance simultaneously. This study provides merit to the developmental theorists' assertions of the importance of looking at contextual factors in developmental research. The current investigation attempted to replicate and extend Gonzales-Backen & Umaña-Taylor's (2011) results with samples of African-American and Latino college students.

Current Investigation

The current investigation explored the following hypotheses and research questions:

Hypothesis 1: Higher levels of family ethnic cultural socialization from parents will predict higher levels of ethnic identity in emerging adults.

This was a replication hypothesis from Gonzales-Backen and Umaña-Taylor (2011). The ethnic identity literature strongly suggests that family ethnic cultural socialization is positively related to ethnic identity (Gonzales-Backen & Umaña-Taylor, 2011; Hughes et al., 2006).

Hypothesis 2: Higher levels of family ethnic cultural socialization will predict higher levels of self-esteem in emerging adults.

Previous research has demonstrated a positive relationship between family ethnic socialization and self-esteem among children and early adolescents (Hughes et al., 2009). This hypothesis was for the purpose of extending those findings in an emerging adult sample.

Hypothesis 3: Higher levels of ethnic identity development will predict higher levels of self-esteem in emerging adults.

Previous research has found a positive relationship between ethnic identity and self-esteem (Grant, 2008). The purpose of this hypothesis was to add to the literature on outcomes associated with the ethnic identity components of exploration, resolution, and affirmation.

Hypothesis 4: The relationship between family ethnic cultural socialization and self-esteem will be mediated by ethnic identity affirmation.

This hypothesis was predicated on social identity theory which postulates that the purpose of one's attempt to maintain positive feelings about one's in-group (as compared to out-groups) is to maintain self-esteem. Given that previous research has found that both family ethnic cultural socialization and ethnic identity positively predict self-esteem, it was hypothesized that ethnic identity affirmation acts as a mediator in the family ethnic cultural socialization–self-esteem relationship.

Research Question 1: Will the relationship between family ethnic cultural socialization and self-esteem will be mediated by ethnic identity exploration?

Given the lack of research and theoretical considerations pertaining to this question, no specific hypotheses were made. This was an exploratory research question.

Research Question 2: Will the relationship between family ethnic cultural socialization and self-esteem be mediated by ethnic identity resolution?

Given the lack of research and theoretical considerations pertaining to this question, no specific hypotheses were made. This was an exploratory research question.

Hypothesis 5: Phenotype characteristics will moderate the relationship between family ethnic cultural socialization and ethnic identity affirmation among Latinos/as.

This was a replication hypothesis from Gonzales-Backen and Umaña-Taylor (2011). This hypothesis is for the purpose of examining whether the previous finding of phenotype characteristics as a moderator in the FECS–ethnic identity affirmation relationship is generalizable to emerging adults.

Research Question 3: Will phenotype characteristics moderate the relationship between family ethnic cultural socialization and ethnic identity exploration or ethnic identity resolution among Latinos/as?

Gonzales-Backen and Umaña-Taylor (2011) reported that phenotype characteristics did not moderate FECS–ethnic identity exploration or FECS–ethnic identity resolution relationships. As such, this was posed as a research question in the current investigation.

Research Question 4: Will phenotype characteristics moderate the relationship between family ethnic cultural socialization and any of the components of ethnic identity (i.e., exploration, affirmation, and resolution) among African Americans?

Given the lack of previous research among African Americans, in terms of phenotype characteristics, FECS, and ethnic identity, this was posed as an exploratory research question in the current investigation.

METHOD

Participants

The sample for this study consisted of 125 male (49%) and female (51%) Northern Illinois University students who were enrolled in an Introduction to Psychology course. The

sample's age range was 18-24 years (M = 19.86; SD = 1.20). The sample was comprised of African-Americans (51.2%) and Latinos/as (48.8%). Parental educational levels were obtained and averaged to index socioeconomic status (SES). Scores ranged from 1 to 8 (1 = some grade school; 2 = finished grade school; 3 = some high school; 4 = finished high school; 5 = some college or 2-year degree; 6 = 4-year degree; 7 = some education beyond college; 8 = professional or graduate degree). Among participants who reported on mothers' educational level, 5.7% had some grade-school education, 6.5% finished grade school, 10.6% had some high school, 19.5% finished high school, 34.1% had some college or a 2-year degree, 4.9% had a 4-year degree, and 18.7% had either some education beyond college or a professional/graduate degree. Among participants who reported on fathers' educational level, 7.8% had some grade-school education, 5.2% finished grade school, 17.4% had some high school, 27.8% finished high school, 23.5% had some college or a 2-year degree, 9.6% had a 4-year degree, and 8.7% had either some education beyond college or a professional/graduate degree. The mean socioeconomic status (SES) level for the entire sample was 4.50 (SD = 1.51). The African-American subsample mean was 5.07 (SD = 1.22). The Latino/a subsample mean was 3.91 (SD = 1.55).

The ethnic breakdown among Latinos was as follows: 62.3% Mexican, 8.0% Puerto Rican, 14.8% mixed Latino ethnicities, and 14.8% other Latino ethnicities. Among Latinos, English was the primary language spoken within the home for 50% of participants. English was the primary language spoken within the home of all of the African American participants.

Among the Latino sample, 75.4% of participants lived with both parents as a child, 3.3% split time with mother and father, 13.1% lived with mother only, 4.9% lived with mother and stepfather, and 3.3% had a different living arrangement. Among the African American sample,

43.8% of participants lived with both parents as a child, 4.7% split time with mother and father, 40.6% lived with mother only, 1.6% lived with father only, 6.3% lived with mother and stepfather, and 3.1% had a different living arrangement.

Procedure

Participants volunteered for the study through an online recruitment website. For compensation, participants received course credit. Using the online recruitment website, participants made appointments to come into the Psychology Department at Northern Illinois University to complete the self-report measures. Participants received both informed consent (see Appendix A) and debriefing forms (see Appendix B) in the Psychology Department laboratory. After participants completed the paper questionnaires, their photographs were taken with a digital camera for the purpose of assessing physical appearance.

Measures

Ethnic identity. Ethnic identity was assessed using the Ethnic Identity Scale (EIS; Umaña-Taylor et al., 2004; see Appendix C). This 17-item self-report measure assessed three domains of ethnic identity: exploration (seven items), resolution (four items), and affirmation (six items). Each subscale is measured on a Likert scale ranging from 1 (*does not describe me at all*) to 4 (*describes me very well*). Sample items for each subscale are as follows: "I have attended events that have helped me learn more about my ethnicity" (Exploration); "I am clear about what my ethnicity means to me" (Resolution); and "My feelings about my ethnicity are mostly negative" (Affirmation; items are reverse coded). Subscale scores are averaged; higher

scores indicate higher levels of the ethnic identity dimensions. As mentioned in a previous section, evidence for construct validity has been established with confirmatory factor analyses and bivariate correlations. Umaña-Taylor et al. (2004) reported Cronbach's alphas for the exploration, resolution, and affirmation subscales of .91, .92, and .86, respectively; an undergraduate sample was used. In the current study, Cronbach's alphas were .82, .89, and .59 for exploration, resolution, and affirmation, respectively (see Table 1). Feldt's test indicated that internal consistency did not differ significantly between the groups.

Table 1

Cronbach's Alphas and Feldt Test Results

Variable	All participants	Latino sample	African American sample	Feldt test[a]	Sample differences[b]
EIS Exploration	.82	.83	.81	.90; .34	No
EIS Resolution	.89	.91	.88	.78; .16	No
EIS Affirmation	.59	.66	.55	.75; .14	No
FECS	.92	.94	.90	.60; .02	Yes
RSE	.74	.71	.76	.83; .23	No

Note: [a] W statistic and *p* value. Calculated using Excel macro. Reference: Suen, H. K. (2009). Feldt test to compare two Cronbach Alpha values. (Excel macro downloadable at http://suen.educ.psu.edu/~hsuen/papers.html). [b] This column indicates whether significant differences were found between the samples.

Family ethnic cultural socialization. Family ethnic cultural socialization was measured using the Familial Ethnic Socialization Measure (FESM; Umaña-Taylor et al., 2004). This measure was used in order to maintain congruency with the methods of Gonzales-Backen and

Umaña-Taylor (2011) for the purpose of study replication. Gonzales-Backen and Umaña-Taylor (2011) assessed only the cultural socialization component of family ethnic socialization. The FESM is a 12-item measure that assesses individuals' reported perceptions of family promotion of participation in their native cultural activities and traditions (see Appendix D). A sample item is as follows: "My family teaches me about our family's ethnic/cultural background." Items are rated on a Likert scale ranging from 1 (*not at all*) to 5 (*very much*). A summary variable was computed by averaging together the 12 item scores. Higher levels of familial ethnic socialization are indicated by higher scores. Prior work with Latino samples has demonstrated support for the measure's construct validity (Supple et al., 2006; Umaña-Taylor, Alfaro, Bamaca, & Guimond, 2009). In a study of adolescents, Umaña-Taylor and Guimond (2010) reported a Cronbach's alpha of .94. The Cronbach's alpha in the current study was .92 (see Table 1). Feldt's test indicated that internal consistency did differ significantly between the groups. Cronbach's alpha in the Latino sample was .94. Cronbach's alpha in the African American sample was .90.

Self-esteem. Self-esteem was assessed with the Rosenberg Self-Esteem (RSE) scale (Rosenberg, 1965). This measure, consisting of 10 items, measured positive and negative feelings about the self (see Appendix E). A sample item is "I take a positive attitude toward myself." Items are rated on a Likert scale ranging from 1 (strongly disagree) to 4 (strongly agree). A sum of the item scores was used in the analyses; higher scores indicate higher levels of self-esteem. The RSE has been found to have high reliability, with a Cronbach's alpha of .92 (Heatherton & Wyland, 2003). Robins, Hendin, and Trzesniewski (2001) demonstrated convergent validity using this measure and a single-item self-esteem measure in diverse samples. Hogborg (1993) also demonstrated convergent validity using a multidimensional measure of

self-concept in an adolescent sample. This measure has been used with individuals from several different ethnic and racial backgrounds, including African Americans and Latino Americans (McGill, 2009; Reinhard, 2010; Schmitt & Allik, 2005). The Cronbach's alpha in the current study was .74 (see Table 1). Feldt's test indicated that internal consistency did not differ significantly between the groups.

Physical appearance. The physical appearance of Latino/Hispanic and Black participants was assessed using the Appearance Rating Sheet (ARS) developed by Gonzales-Backen and Umaña-Taylor (2011) and modified for use with African Americans in the current investigation. Coders used photographs of participants to assess physical appearance with the ARS. Participants' photographs were taken by investigators after completion of the self-report measures. All photographs were taken in the same well-lit location.

The Appearance Rating Sheet assessed both ethnic appearance and skin color; all questions were generated by Gonzales-Backen and Umaña-Taylor (2011; see Appendix F). This sheet includes skin color blots in conjunction with the question "This individual's skin color is…?" Coders rated the skin color of participants using a Likert scale ranging from 1 (*very light*) to 11 (*very dark*). The original ARS included nine skin color blots; however, at the recommendation of the measure's author, 2 darker skin tone blots were added for the current investigation's assessment of African American skin tones (M. A. Gonzales-Backen, personal communication, October 21, 2012). Lopez (2008) obtained both participant-rated and interviewer-rated scores using a similar method, without the accompanying skin color blots, in a Puerto Rican sample. Additionally, Lopez (2008) used an objective measure of skin color (via reflectometry) and reported high correlations between all types of measures (the range of the

absolute values of the correlations was .70 to .82). Due to the high correlations between the different methods of assessment, this investigation used only one: coder-ratings.

In response to the statement "This person looks…," coders rated the ethnic appearance of all participants using a Likert scale ranging from 1 (*not at all European*) to 9 (*very European*). Coders responded to the same statement as above using a Likert scale ranging from 1 (*not at all Latino/Black*) to 9 (*very Latino/Black*). In total, four indices of physical appearance were used: skin color, Latino appearance, Black appearance, and European appearance. In their work with a Latino sample, Gonzales-Backen and Umaña-Taylor (2011) reported kappa coefficients of .93, .88, and .90 for skin color, Latino appearance, and European appearance, respectively.

Consistent with the methodology of Gonzales-Backen and Umaña-Taylor (2011), no training was provided to the coders (M. A. Gonzales-Backen, personal communication, September 9, 2013). In the event that a coder asked a question such as, "What do you mean by 'looks Latino'?", the investigator responded with the statement "Whatever you think it means"; this is consistent with the methods used by Gonzalez-Backen and Umaña-Taylor (2011; M. A. Gonzales-Backen, personal communication, October 21, 2012). Participants' physical appearance was coded by three coders: two European American graduate students and one Latina undergraduate student. The principal investigator was not a coder. In line with the Gonzales-Backen and Umaña-Taylor (2011) study, averaged coder-ratings were used for the analyses. As mentioned previously, Gonzales-Backen and Umaña-Taylor (2011) obtained high levels of inter-rater agreement despite the lack of a training protocol. The intraclass correlation coefficients for the current study were .97, .92, .77, and .99 for skin tone, Latino appearance, European appearance, and African appearance, respectively. Eleven participants in the African

American sample declined to have their photos taken. In these cases, self-reported ARS scores were used; examination of intraclass correlation coefficients for self-reported and coded ratings found acceptable levels of reliability (i.e., ranging between .71 and .92).

Demographic variables. The following demographic information was assessed with a questionnaire: age, gender, ethnicity, parents' ethnicity, grandparents' ethnicity, participants' place of birth, parents' and grandparents' place of birth, parental education level, parental occupational status, family structure, primary language spoken at home, year in college, marital status, and name and location of high school attended (see Appendix G).

Generational status was assessed using the method of Gonzales-Backen and Umaña-Taylor (2011). A composite variable was calculated using the demographic questionnaire item pertaining to location of birth. For each individual (including the participant) that was born in the United States, a code of 1 was assigned. A code of 0 was assigned to non-native-born family members. The generational status variable ranged from 0 (no family members born in the United States) to 7 (participant and all family members born in the United States). The majority (57.4%) of the Latino/a sample's participants were first-generation Americans. Among the Latino sample, 95.1% were born in the U.S., 31.1% had mothers born in the U.S., and 24.6% had fathers born in the U.S. The majority (56.3%) of the African-American sample's participants reported that all of their family members were U.S.-born.

Analysis Plan

Preliminary analyses were conducted to obtain descriptive statistics and bivariate correlations. Reliability was assessed.

Using regression methods detailed in Cohen, Cohen, West, and Aiken (2003), the data analyses were completed with SPSS. Continuous independent variables were mean centered before analyses were conducted. Variable distributions were examined during preliminary analyses.

In line with the methods of Gonzales-Backen and Umaña-Taylor (2011), generational status, socioeconomic status, and participant gender were used as control variables in the analyses. Generational status (Umaña-Taylor & Fine, 2004), socioeconomic status (Hughes et al., 2008), and gender (Hughes et al., 2008) have been found to influence family ethnic cultural socialization. For the purpose of follow-up analyses for discussion, participant age and family composition were examined as control variables.

RESULTS

Preliminary Analyses

Preliminary analyses were conducted to obtain descriptive statistics (see Tables 2 and 3) and bivariate correlations (see Tables 4, 5, and 6). Variable distributions were examined. In both the Latino and African American samples, the assumption of normality was not met for the ethnic identity affirmation variable. The skewness and kurtosis statistics for the Latino sample were -2.41 and 5.20, respectively. The skewness and kurtosis statistics for the African American sample were -2.38 and 8.22, respectively. A natural logarithmic transformation was performed

Table 2

Descriptive Statistics—Latino and African American Samples

	Latino				African American			
Variable	M	SD	Skew	Kurt.	M	SD	Skew	Kurt.
SES*	3.91	1.55	.36	.07	5.07	1.22	.45	-.28
Nativity*	1.82	1.34	1.08	.13	5.67	1.84	-1.26	.70
FECS*	4.03	.88	-1.08	.82	3.60	.80	-.03	-.76
EIS-E	3.13	.77	-.79	-.11	3.25	.63	-.61	-.38
EIS-R	3.46	.65	-1.43	2.40	3.30	.65	-.42	-.96
EIS-A*	3.90	.23	-2.41	5.20	3.80	.30	-2.38	8.22
Self-esteem	34.92	3.56	-.61	.22	35.95	3.37	-.46	-.37
Skin Tone*	4.32	1.36	-.19	-.52	8.78	1.10	-.28	-.16
Latino A.*	6.95	1.64	-1.16	1.59	1.70	.86	1.72	3.23
European A.*	2.84	1.80	1.20	1.10	1.09	.21	2.73	7.85
African A.*	1.07	.18	3.33	12.64	8.44	.73	-2.50	7.45

Note. * indicates statistically significant mean differences between ethnic groups. SES = Socioeconomic Status. FECS = Family Ethnic Cultural Socialization. EIS-E = Ethnic Identity Exploration. EIS-R = Ethnic Identity Resolution. EIS-A = Ethnic Identity Affirmation. A = Appearance.

Table 3

Descriptive Statistics—Total Sample

Variable	M	SD	Skew	Kurt.
SES	4.50	1.51	.07	-.08
Nativity	3.79	2.52	.10	-1.58
FECS	3.81	.86	-.49	-.44
EIS-E	3.19	.70	-.77	-.01
EIS-R	3.38	.65	-.88	.37
EIS-A	3.85	.27	-2.44	7.96
Self-esteem	35.45	3.49	-.54	-.02
Skin Tone	6.44	2.56	-.09	-1.20
Latino App.	4.46	2.95	.14	-1.64
European App.	2.01	1.57	1.98	3.81
African App.	4.56	3.74	.15	-1.97

Note. SES = Socioeconomic Status. FECS = Family Ethnic Cultural Socialization. EIS-E = Ethnic Identity Exploration. EIS-R = Ethnic Identity Resolution. EIS-A = Ethnic Identity Affirmation. App = Appearance.

Table 4

Intercorrelations among Variables—Total Sample

	Variable	1	2	3	4	5	6	7	8	9
1.	FECS	—								
2.	EI Exploration	.66**	—							
3.	EI Resolution	.48**	.65**	—						
4.	EI Affirmation	.30**	.29**	.20*	—					
5.	Skin Tone	-.21*	.11	-.09	-.20*	—				
6.	Latino Appearance	.18	-.13	.10	.19*	-.70**	—			
7.	Euro. Appearance	.11	-.11	-.05	.06	-.73**	.20*	—		
8.	African Appearance	-.19*	.15	-.08	-.18	.90**	-.90**	-.57**	—	
9.	Self-esteem	-.14	.29**	.28**	-.01	.17	-.14	-.08	.16	—

Note. * $p < .05$. ** $p < .01$.

Table 5

Intercorrelations among Variables—Latino Sample

	Variable	1	2	3	4	5	6	7	8	9
1.	FECS	—								
2.	EI Exploration	.76**	—							
3.	EI Resolution	.47**	.62**	—						
4.	EI Affirmation	.46**	.57**	.26*	—					
5.	Skin Tone	-.12	-.07	-.06	.01	—				
6.	Latino Appearance	.02	.03	.10	.06	.74**	—			
7.	Euro. Appearance	.00	-.04	-.16	-.08	-.74**	-.93**	—		
8.	African Appearance	.10	.14	-.08	.13	.47**	.31**	-.28*	—	
9.	Self-esteem	.10	.15	.14	.09	.04	-.02	.01	.21	—

Note. * $p < .05$. ** $p < .01$.

Table 6

Intercorrelations among Variables—African American Sample

	Variable	1	2	3	4	5	6	7	8	9
1.	FECS	—								
2.	EI Exploration	.63**	—							
3.	EI Resolution	.46**	.74**	—						
4.	EI Affirmation	.12	.10	.13	—					
5.	Skin Tone	-.02	.07	-.02	-.18	—				
6.	Latino Appearance	.04	-.09	.01	.08	-.64**	—			
7.	Euro. Appearance	.05	-.01	.03	-.01	-.39**	.62**	—		
8.	African Appearance	.01	.03	-.05	.01	.60**	-.78**	-.72**	—	
9.	Self-esteem	.28*	.44**	.47**	-.03	.14	-.03	-.13	.08	—

Note. * $p < .05$. ** $p < .01$.

on the EI affirmation variable. The skewness and kurtosis statistics improved to 2.14 and 3.65, respectively, in the Latino sample and 1.45 and 2.48, respectively, in the African American sample.

The assumption of normality was not met for the ethnic identity resolution variable in the Latino sample. The skewness and kurtosis statistics were -1.43 and 2.40, respectively. After a logarithmic natural transformation was performed, the statistics improved to .65 and -.59 for skewness and kurtosis, respectively.

The study's hypotheses and research questions were tested using untransformed variables. However, in some cases, additional analyses using transformed variables were conducted for comparisons, due to the negative skewness of the EI resolution and EI affirmation variables. These additional analyses are noted in this section.

Table 1 displays the results of scale reliability analyses. Additional analyses were conducted to examine the Cronbach's alphas from the Latino and African American samples for statistical differences. Feldt's test (Feldt, Woodruff, & Salih, 1987) indicated that internal consistency did not differ significantly between the groups on all variables with the exception of the FECS variable; it was found that internal consistency differed between the two ethnic groups.

Examination of bivariate correlations among the total sample as well as the Latino and African American subsamples revealed several noteworthy findings. In terms of physical appearance, the correlation coefficients using the total sample were consistent with what would be expected—this is, darker skin tone was correlated with a more African American appearance ($r = .90$, $p < .01$) and darker skin tone was correlated with a less Latino appearance ($r = -.70$, $p < .01$) in the total sample. Additionally, darker skin tone was correlated with a less European

appearance (r = -.73, p < .01) in the total sample. In the Latino subsample, darker skin tone was correlated with a more Latino appearance (r = .74, p < .01) and darker skin tone was correlated with a less European appearance (r = -.74, p < .01). In the African American subsample, darker skin tone was correlated with a more African American appearance (r = .60, p < .01) and darker skin tone was correlated with a less European appearance (r = -.39, p < .01).

Other correlation findings worth mentioning are the patterns among EI variables across the subsamples. Self-esteem was not significantly correlated with FECS or any EI component in the Latino sample. However, higher levels of self-esteem were significantly correlated with higher levels of FECS (r = .28, p < .05), EI exploration (r = .44, p < .01), and EI resolution (r = .47, p < .01) among African Americans. Among Latinos, higher levels of FECS were significantly correlated with higher levels of EI exploration (r = .76, p < .01), EI resolution (r = .47, p < .01), and EI affirmation (r = .46, p < .01). Higher levels of EI exploration were associated with higher levels of EI resolution (r = .62, p < .01) and EI affirmation (r = .57, p < .01) in the Latino sample. Higher levels of EI resolution were associated with higher levels of EI affirmation (r = .26, p < .05) in the Latino sample. In contrast, among African Americans, FECS was only correlated with EI exploration and EI resolution. Higher levels of FECS were associated with higher levels of EI exploration (r = .63, p < .01) and EI resolution (r = .46, p < .01). Higher levels of EI exploration were associated with higher levels of EI resolution (r = .74, p < .01). EI affirmation was not associated with any other EI component among African Americans.

Hierarchical Regression Analyses

All regression models contained participants' gender, SES, and generational status as control variables in Step 1.

Hypothesis 1: Higher levels of family ethnic cultural socialization (FECS) from parents will predict higher levels of ethnic identity in emerging adults.

To test Hypothesis 1, three hierarchical regressions were conducted. Each regression analysis included one of the three ethnic identity components (i.e., exploration, resolution, and affirmation) as dependent variables. For all three regression analyses, gender, parents' education, and generational status were entered into the first block of analyses. Next, for all three regression analyses, FECS was entered as the independent variable of interest in the second block of analyses.

All three regression analyses indicated support for Hypothesis 1. After controlling for gender, SES, and generational status, FECS was a found to be a statistically significant positive predictor of EI exploration, EI resolution, and EI affirmation. Higher levels of FECS were related to higher levels of EI exploration, EI resolution, and EI affirmation. Results of the three regressions can be seen in Tables 7, 8, and 9.

Hypothesis 2: Higher levels of family ethnic cultural socialization will predict higher levels of self-esteem in emerging adults.

To test Hypothesis 2, a regression analysis was conducted with self-esteem as the dependent variable. Gender, parents' education, and generational status were entered into the first block of the regression model. For the second block of analyses, FECS was entered.

Table 7

Family Ethnic Cultural Socialization Predicting Ethnic Identity Exploration

Variable	B	SE	β	ΔR^2
Step 1				.07
Gender	-.21	.20	-.14	
SES	-.07	.08	-.12	
Generational Status	-.07	.07	-.15	
Step 2				.54**
Family ethnic cultural socialization	.72**	.08	.83**	

Note. ** $p < .01$.

Table 8

Family Ethnic Cultural Socialization Predicting Ethnic Identity Resolution

Variable	B	SE	β	ΔR^2
Step 1				.13*
Gender	-.34*	.16	-.26*	
SES	.00	.07	-.01	
Generational Status	-.11	.06	-.26	
Step 2				.16**
Family ethnic cultural socialization	.34**	.09	.45**	

Note. * $p < .05$. ** $p < .01$.

Table 9

Family Ethnic Cultural Socialization Predicting Ethnic Identity Affirmation

Variable	B	SE	β	ΔR^2
Step 1				.01
Gender	-.04	.06	-.09	
SES	.00	.02	.01	
Generational Status	.00	.02	.00	
Step 2				.26**
Family ethnic cultural socialization	.15**	.03	.58**	

Note. ** $p < .01$.

Support was found for Hypothesis 2. Regression analysis indicated that FECS is a statistically significant positive predictor of self-esteem, after controlling for gender, SES, and generational status. Higher levels of FECS were related to higher levels of self-esteem (see Table 10).

Hypothesis 3: Higher levels of ethnic identity development will predict higher levels of self-esteem in emerging adults.

Three regression analyses were conducted with self-esteem as the dependent variable. Gender, parents' education, and generational status were entered into the first block of the regression model. For the second block of analyses, each regression included only one component of ethnic identity (i.e., exploration, resolution, or affirmation) as the independent variable.

Table 10

Family Ethnic Cultural Socialization Predicting Self-Esteem

Variable	B	SE	β	ΔR^2
Step 1				.11**
Gender	2.22**	.62	.31**	
SES	.19	.22	.08	
Generational Status	.09	.13	.07	
Step 2				.03†
Family ethnic cultural socialization	.71†	.36	.18†	

Note. † $p = .05$. * $p < 05$. ** $p < .01$.

Two out of the three regression analyses found support for Hypothesis 3. After controlling for gender, SES, and generational status, it was found that higher levels of EI exploration were related to higher levels of self-esteem (see Table 11). Likewise, higher levels of EI resolution were related to higher levels of self-esteem (see Table 12). No statistically significant prediction was found for EI affirmation on self-esteem (see Table 13).

Hypothesis 4: The relationship between family ethnic cultural socialization and self-esteem will be mediated by ethnic identity affirmation.

The bootstrapping method described by Preacher and Hayes (2008) was used to test for mediation. In SPSS, family ethnic cultural socialization was entered as the independent variable, self-esteem was entered as the dependent variable, and ethnic identity affirmation was entered as

Table 11

Ethnic Identity Exploration Predicting Self-Esteem

Variable	B	SE	β	ΔR^2
Step 1				.11**
Gender	2.23**	.62	.31**	
SES	.19	.22	.08	
Generational Status	.09	.13	.07	
Step 2				.08**
EI Exploration	1.41**	.41	.28**	

Note. * $p < .05$. ** $p < .01$.

Table 12

Ethnic Identity Resolution Predicting Self-Esteem

Variable	B	SE	β	ΔR^2
Step 1				.11**
Gender	2.23**	.62	.31**	
SES	.19	.22	.08	
Generational Status	.09	.13	.07	
Step 2				.09**
EI Resolution	1.65**	.44	.31**	

Note. * $p < .05$. ** $p < .01$.

Table 13

Ethnic Identity Affirmation Predicting Self-Esteem

Variable	B	SE	β	ΔR^2
Step 1				.11**
Gender	2.23**	.62	.31**	
SES	.19	.22	.08	
Generational Status	.09	.13	.07	
Step 2				.00
EI Affirmation	.42	1.14	.03	

Note. * $p < .05$. ** $p < .01$.

a mediator. The bootstrapping method computes 95% confidence intervals for the indirect effect (Preacher & Hayes, 2008). Mediation is evident if zero does not fall within the 95% confidence interval.

Hypothesis 4 was not supported (see Table 14 and Figure 1). Mediation analysis conducted using SPSS PROCESS macros (Preacher & Hayes, 2008) was not statistically significant. The path coefficients, standard errors, and *p* values, respectively, were as follows: Path a: .08, .03, $p = .003$; Path b: .19, 1.17, $p = .87$; Path c: .71, .36, $p = .05$; Path *c'*: .72, .37, $p = .05$. The indirect effect of FECS on self-esteem through EI affirmation was -.02 with a 95% confidence interval of [-.19, .19] Confidence intervals were created using 5,000 bootstrap samples. The confidence interval included zero, indicating that mediation was not present.

Table 14

Mediation of the Relationship between Family Ethnic Cultural Socialization and Self-Esteem

Mediator	Model estimates				Indirect effect	
	Path a	Path b	Path c	Path *c'*	Estimate	95% CI
EI Exploration	.58**	1.58 *	.71†	-.22	.92	[.25, 1.67]
	(.06)	(.57)	(.36)	(.48)		
EI Resolution	.35**	1.55**	.71†	.16	.55	[.24, .97]
	(.06)	(.50)	(.36)	(.39)		
EI Affirmation	.08**	.19	.71†	.72†	-.02	[-.19, .19]
	(.03)	(1.17)	(.36)	(.37)		

Note. Standard errors are in parentheses.
† $p = .05$. * $p < .05$. ** $p < .01$.

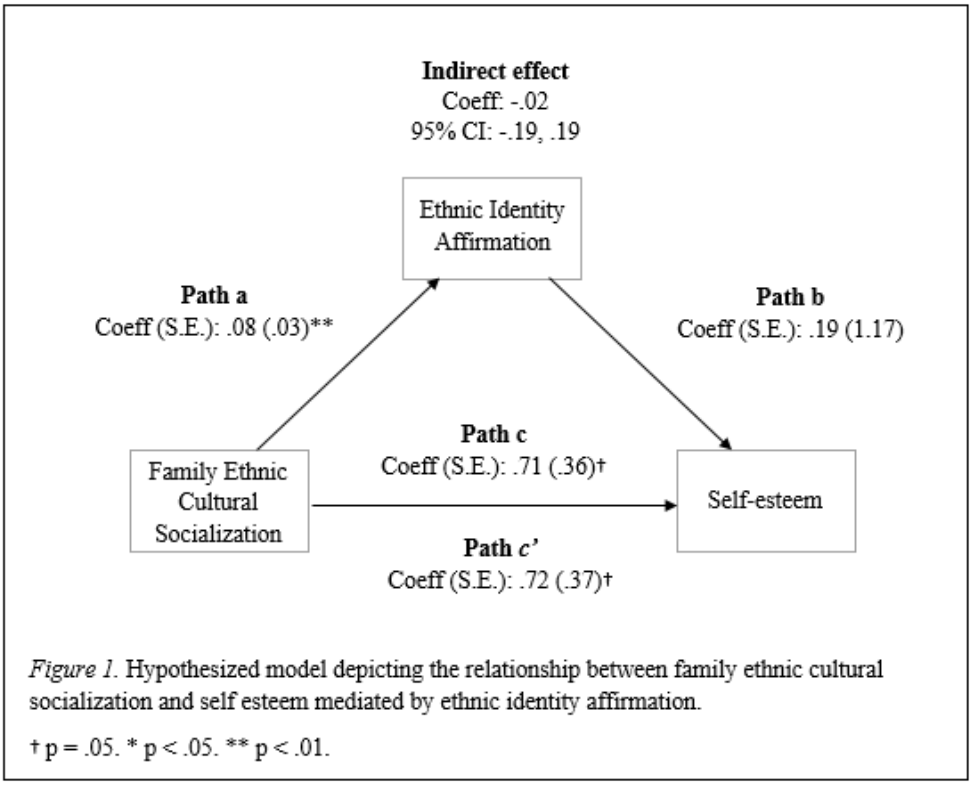

Figure 1. Hypothesized model depicting the relationship between family ethnic cultural socialization and self esteem mediated by ethnic identity affirmation.

† p = .05. * p < .05. ** p < .01.

Research Question 1: Will the relationship between family ethnic cultural socialization and self-esteem will be mediated by ethnic identity exploration?

The bootstrapping method described by Preacher and Hayes (2008) was used to test for mediation. In SPSS, family ethnic cultural socialization was entered as the independent variable, self-esteem was entered as the dependent variable, and ethnic identity exploration was entered as a mediator.

Results revealed statistically significant mediation (see Table 14). Figure 2 depicts the path diagram of the mediation analysis. The path coefficients, standard errors, and *p* values, respectively, were as follows: Path a: .58, .06, $p = .00$; Path b: 1.58, .57, $p = .01$; Path c: .71, .36, $p = .05$; Path *c'*: -.22, .48, $p = .66$. The indirect effect of FECS on self-esteem through EI exploration was .92 with a 95% confidence interval of [.28, 1.67]. Confidence intervals were created using 5,000 bootstrap samples. The confidence interval did not include zero, indicating that mediation was present.

Research Question 2: Will the relationship between family ethnic cultural socialization and self-esteem be mediated by ethnic identity resolution?

The bootstrapping method described by Preacher and Hayes (2008) was used to test for mediation. In SPSS, family ethnic cultural socialization was entered as the independent variable, self-esteem was entered as the dependent variable, and ethnic identity affirmation was entered as a mediator.

Mediation analysis revealed statistically significant mediation (see Table 14). Figure 3 depicts the path diagram of the mediation analysis. The path coefficients, standard errors, and *p*

values, respectively, were as follows: Path a: .35, .06, p = .00; Path b: 1.55, .50, p = .00; Path c: .71, .36, p = .05; Path *c'*: .16, .39, p = .69. The indirect effect of FECS on self-esteem through EI resolution was .55 with a 95% confidence interval of [.24, .97]. Confidence intervals were created using 5,000 bootstrap samples. The confidence interval did not include zero, indicating that mediation was present.

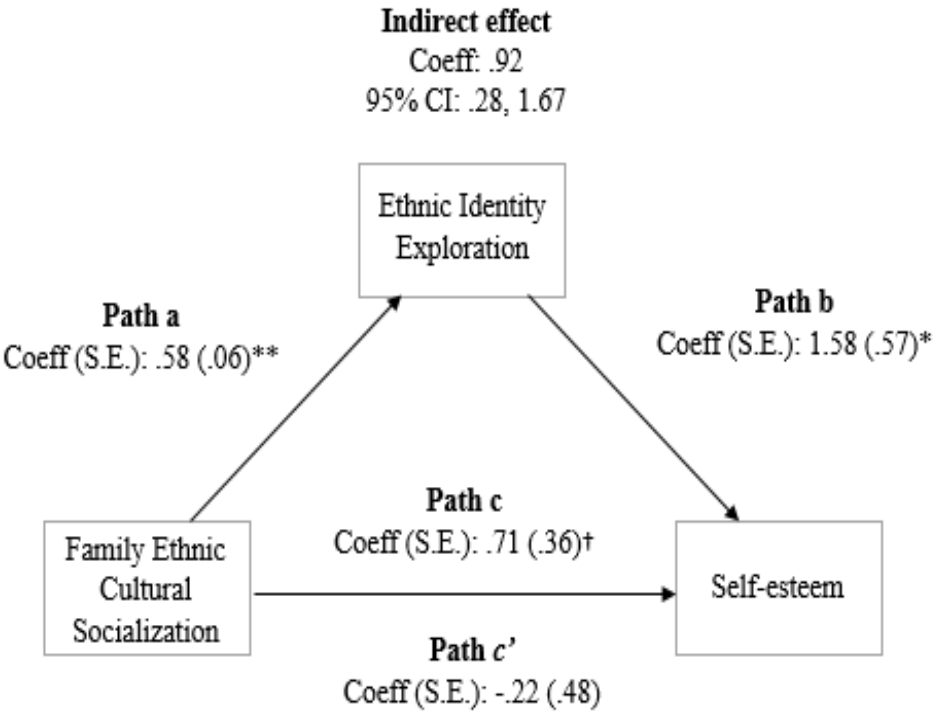

Figure 2. Model depicting the relationship between family ethnic cultural socialization and self-esteem mediated by ethnic identity exploration.

† p = .05. * p < .05. ** p < .01.

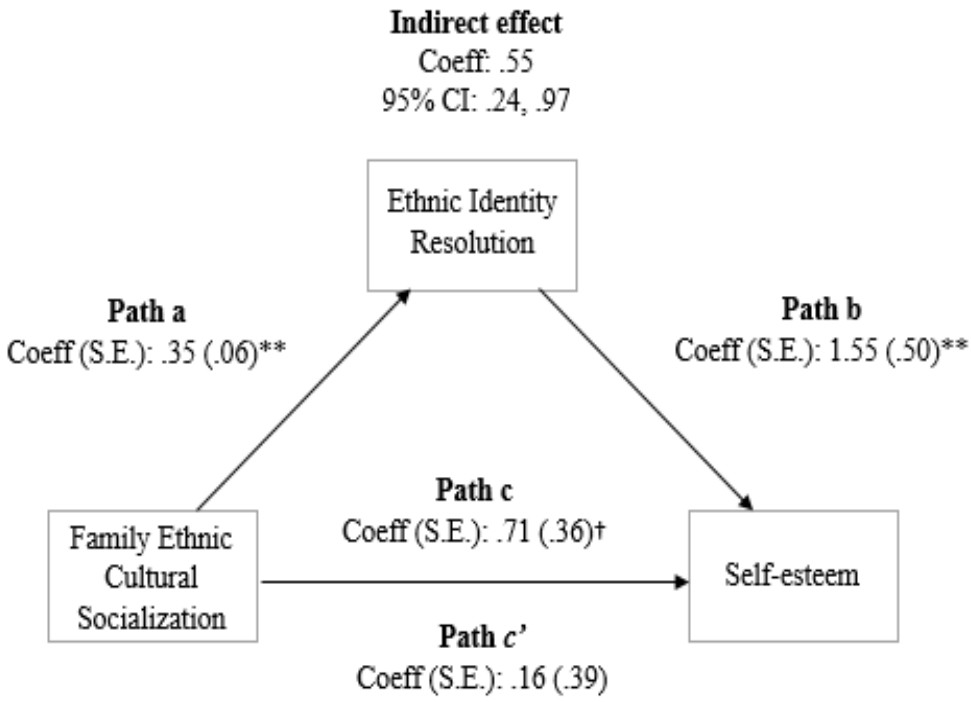

Figure 3. Model depicting the relationship between family ethnic cultural socialization and self-esteem mediated by ethnic identity resolution.

† p = .05. ** p < .01.

Hypothesis 5: Phenotype characteristics will moderate the relationship between family ethnic cultural socialization and ethnic identity affirmation among Latinos/as.

To test Hypothesis 5, four separate regression analyses were conducted using only data from Latino/a participants. Gender, parents' education, and generational status were entered as independent variables in the first block of analyses and ethnic identity affirmation was entered as the dependent variable. FECS was entered as the independent variable in the second block of analyses. Each regression model included one index of physical appearance (i.e., skin color, Latino appearance, Black appearance, and European appearance) as a predictor variable in the third block of analyses. Finally, each of the four regression models included the interaction term between one index of physical appearance and FECS in the fourth block of analyses in order to test for moderation. The continuous variables were centered prior to creating the interaction terms.

Hypothesis 5 was not supported. None of the four regression analyses indicated statistically significant prediction of EI affirmation by the interaction terms (see Tables 15, 16, 17, and 18). The regression model including the skin tone phenotype index approached trend-level significance.

Due to the EI affirmation variable being negatively skewed, additional analyses were conducted using the log transformed version of this variable. The results of those analyses were consistent with the original findings—no statistically significant moderation was found. However, the regression model including the skin tone phenotype index approached significance when the transformed EI affirmation variable was used.

Research Question 3: Will phenotype characteristics moderate the relationship between family ethnic cultural socialization and ethnic identity exploration or ethnic identity resolution among Latinos/as?

To test Research Question 3, four separate regression analyses were conducted for two aspects of ethnic identity (exploration and resolution). Only data from Latino/a participants was used in the analyses. Gender, parents' education, and generational status were entered as independent variables in the first block of analyses and one aspect of ethnic identity (exploration or resolution) was entered as the dependent variable. FECS was entered as the independent variable in the second block of analyses. Each regression model included one index of physical appearance (i.e., skin color, Latino appearance, Black appearance, and European appearance appearance) as a predictor variable in the third block of analyses. Finally, each of the four regression models included the interaction term between one index of physical appearance and FECS in the fourth block of analyses in order to test for moderation. The continuous variables were centered prior to creating the interaction term.

Four moderation analyses were conducted with EI exploration as the dependent variable. None of those analyses resulted in statistically significant results. Refer to Tables 15, 16, 17, and 18.

Four moderation analyses were conducted with EI resolution as the dependent variable. Results revealed statistically significant prediction of EI affirmation by African American appearance (see Table 18). None of the other interaction terms evidenced statistically significant moderation (see Tables 15, 16, and 17). Due to the EI resolution variable's negative skew, additional analyses were conducted using the log transformed version of this variable. The

Table 15

Family ethnic socialization and skin color predicting ethnic identity components among Latinos/as

Predictor	Exploration				Resolution				Affirmation			
	B	SE	β	ΔR^2	B	SE	β	ΔR^2	B	SE	β	ΔR^2
Step 1				.06				.13*				.01
Gender	-.19	.20	-.13		-.33*	.16	-.25*		-.03	.06	-.08	
SES	-.08	.07	-.16		-.11†	.06	-.26†		.00	.02	.00	
Generational status	-.07	.08	-.11		.00	.06	.00		.00	.03	.01	
Step 2				.54**				.16**				.26**
FECS (A)	.72**	.08	.82**		.33**	.10	.45**		.15**	.03	.58**	
Step 3				.00				.00				.02
Skin color (B)	.04	.05	.07		.01	.06	.03		.03	.02	.15	
Step 4				.00				.01				.03
A x B	.02	.06	.03		.05	.06	.10		.04	.02	.20	

Note. † p <.10. * p < .05. ** p < .01.

Table 16

Family ethnic socialization and Latino appearance predicting ethnic identity components among Latinos/as

Predictor	Exploration				Resolution				Affirmation			
	B	SE	β	ΔR^2	B	SE	β	ΔR^2	B	SE	β	ΔR^2
Step 1				.06				.13*				.01
Gender	-.19	.20	-.13		-.33*	.16	-.25*		-.04	.06	-.08	
SES	-.08	.07	-.16		-.11†	.06	-.26†		.00	.02	.00	
Generational status	-.07	.08	-.11		.00	.06	.00		.00	.03	.01	
Step 2				.54**				.16**				.26**
FECS (A)	.72**	.08	.82**		.33**	.10	.45**		.15**	.03	.58**	
Step 3				.00				.01				.01
Latino app. (B)	.01	.04	.03		.03	.05	.07		.01	.02	.09	
Step 4				.00				.01				.00
A x B	-.02	.05	-.03		.06	.06	.11		.01	.02	.03	

Note. † $p < .10$. * $p < .05$. ** $p < .01$.

Table 17

Family ethnic socialization and European appearance predicting ethnic identity components among Latinos/as

	Exploration				Resolution				Affirmation			
Predictor	B	SE	β	ΔR^2	B	SE	β	ΔR^2	B	SE	β	ΔR^2
Step 1				.06				.13*				.01
Gender	-.19	.20	-.13		-.33*	.16	-.25*		-.04	.06	-.08	
SES	-.08	.07	-.16		-.11†	.06	-.26†		.00	.02	.02	
Generational status	-.07	.08	-.11		.00	.06	.00		.00	.03	.01	
Step 2				.54**				.16**				.26**
FECS (A)	.72**	.08	.82**		.33**	.10	.45**		.15**	.03	.58**	
Step 3				.00				.02				.01
European app. (B)	-.03	.04	-.06		-.05	.04	-.15		-.02	.02	-.11	
Step 4				.00				.00				.01
A x B	.03	.05	.06		-.03	.05	-.06		-.02	.02	-.11	

Note. † $p < .10$. * $p < .05$. ** $p < .01$.

Table 18

Family ethnic socialization and African appearance predicting ethnic identity components among Latinos/as

Predictor	Exploration				Resolution				Affirmation			
	B	SE	β	ΔR^2	B	SE	β	ΔR^2	B	SE	β	ΔR^2
Step 1				.06				.13*				.01
Gender	-.19	.20	-.13		-.33*	.16	-.25*		-.04	.06	-.08	
SES	-.08	.07	-.16		-.11†	.06	-.26†		.00	.02	.02	
Generational status	-.07	.08	-.11		.00	.06	.00		.00	.03	.01	
Step 2				.54**				.16**				.26**
FECS (A)	.72**	.08	.82**		.33**	.10	.45**		.15**	.03	.58**	
Step 3				.01				.01				.01
African app. (B)	.35	.37	.08		-.38	.42	-.11		.13	.15	.10	
Step 4				.00				.05*				.01
A x B	-.22	.94	-.03		2.08*	1.03	.32*		-.37	.38	-.16	

Note. † $p < .10$. * $p < .05$. ** $p < .01$.

results of those analyses revealed no statistically significant moderation. The FECS x African American appearance term which was previously statistically significant became non-significant when the transformed EI resolution variable was used, suggesting that the relationship is not robust after correcting for non-normality.

Research Question 4: Will phenotype characteristics moderate the relationship between family ethnic cultural socialization and any of the components of ethnic identity (i.e., exploration, affirmation, and resolution) among African Americans?

To test Research Question 4, four separate regression analyses were conducted for each aspect of ethnic identity (exploration, affirmation, resolution). Only data from African American participants was used in the analyses. Gender, parents' education, and generational status were entered into the first block of analyses as control variables and each regression included one aspect of ethnic identity as a dependent variable. FECS was entered in the second block of analyses. Each regression model included one index of physical appearance (i.e., skin color, Latino appearance, Black appearance, and European appearance) as a predictor variable in the third block of analyses. Finally, each of the four regression models included the interaction term between one index of physical appearance and FECS in the fourth block of analyses in order to test for moderation. The continuous variables were centered prior to creating the interaction term.

Twelve moderation analyses were conducted to examine this research question. None of those analyses resulted in statistically significant results (see Tables 19, 20, 21, and 22).

Table 19

Family Ethnic Socialization and Skin Color Predicting Ethnic Identity Components among African Americans

	Exploration				Resolution				Affirmation			
Predictor	B	SE	β	ΔR^2	B	SE	β	ΔR^2	B	SE	β	ΔR^2
Step 1				.09				.07				.12
Gender	.34†	.18	.27†		.36†	.19	.26		-.01	.09	-.01	
SES	.05	.07	.11		.04	.08	.08		-.09*	.04	-.34*	
Generational status	.02	.05	.07		.00	.05	-.01		.02	.02	.10	
Step 2				.48**				.22**				.03
FECS (A)	.56**	.08	.71**		.41**	.11	.49**		.07	.06	.17	
Step 3				.01				.00				.04
Skin color (B)	.05	.06	.08		-.02	.08	-.03		-.07	.04	-.22	
Step 4				.02				.03				.00
A x B	-.14	.09	-.17		-.17	.13	-.18		.00	.07	.00	

Note. † $p < .10$. * $p < .05$. ** $p < .01$.

Table 20

Family Ethnic Socialization and Latino Appearance Predicting Ethnic Identity Components among African Americans

Predictor	Exploration				Resolution				Affirmation			
	B	SE	β	ΔR^2	B	SE	β	ΔR^2	B	SE	β	ΔR^2
Step 1				.09				.07				.12
Gender	.34†	.18	.27†		.36†	.19	.26†		-.01	.09	-.01	
SES	.05	.07	.11		.04	.08	.08		-.09*	.04	-.34*	
Generational status	.02	.05	.07		.00	.05	-.01		.02	.02	.10	
Step 2				.48**				.22**				.03
FECS (A)	.56**	.08	.71**		.41**	.11	.49**		.07	.06	.17	
Step 3				.02				.00				.00
Latino app. (B)	-.10	.07	-.14		-.03	.10	-.04		.02	.05	.06	
Step 4				.02				.04				.03
A x B	.20	.12	.16		.28	.17	.21		.11	.09	.17	

Note. † $p < .10$. ** $p < .01$.

Table 21

Family Ethnic Socialization and European Appearance Predicting Ethnic Identity Components among African Americans

Predictor	Exploration				Resolution				Affirmation			
	B	SE	β	ΔR^2	B	SE	β	ΔR^2	B	SE	β	ΔR^2
Step 1				.09				.07				.12
Gender	.34†	.18	.27†		.36†	.19	.26†		-.01	.09	-.01	
SES	.05	.07	.11		.04	.08	.08		-.09*	.04	-.34*	
Generational status	.02	.05	.07		.00	.05	-.01		.02	.02	.10	
Step 2				.48**				.22**				.03
FECS (A)	.56**	.08	.71**		.41**	.11	.49**		.07	.06	.17	
Step 3				.00				.00				.00
European app. (B)	-.17	.29	-.06		.03	.41	.01		-.03	.22	-.02	
Step 4				.00				.00				.00
A x B	.08	.57	.02		.30	.80	.06		.03	.42	.01	

Note. † $p < .10$. * $p < .05$. ** $p < .01$.

Table 22

Family Ethnic Socialization and African Appearance Predicting Ethnic Identity Components among African Americans

Predictor	Exploration				Resolution				Affirmation			
	B	SE	β	ΔR^2	B	SE	β	ΔR^2	B	SE	β	ΔR^2
Step 1				.09				.07				.12
Gender	.34†	.18	.27†		.36†	.19	.26†		-.01	.09	-.01	
SES	.05	.07	.11		.04	.08	.08		-.09*	.04	-.34*	
Generational status	.02	.05	.07		.00	.05	-.01		.02	.02	.10	
Step 2				.48**				.22**				.03
FECS (A)	.56**	.08	.71**		.41**	.11	.49**		.07	.06	.17	
Step 3				.00				.01				.00
African app. (B)	.01	.08	.02		-.06	.12	-.07		-.01	.06	-.03	
Step 4				.02				.03				.02
A x B	-.29	.20	-.16		-.40	.28	-.20		-.14	.15	-.15	

Note. † $p < .10$. * $p < .05$. ** $p < .01$.

DISCUSSION

This investigation had two aims: to replicate and extend the findings of Gonzales-Backen and Umaña-Taylor (2011; Hypotheses 1 & 5 and Research Questions 3 & 4) and to examine FECS and EI in relation to self-esteem (Hypotheses 2-4 and Research Questions 1 & 2). This discussion section is organized according to the aims of the study. The replication/extension results will be discussed first. The results involving self-esteem will be addressed last.

Replication and Extension of Gonzales-Backen and Umaña-Taylor (2011)

For Hypothesis 1, it was expected that FECS would positively predict all three components of EI (i.e., exploration, resolution, and affirmation) among Latinos. Support was found for this hypothesis. Research has consistently found linkages between FECS and both EI exploration and EI resolution. However, unlike the current study's finding, previous research examining associations between FECS and EI affirmation did not find statistically significant relationships (Supple et al., 2006; Umaña-Taylor et al., 2004). It has been suggested that family and environmental factors affect the relationship between FECS and EI affirmation (Supple et al., 2006). The mixed results across studies may be explained by these factors (this consideration will be discussed in more detail below). The inconsistency within the literature, with respect to the FES–EI affirmation linkage, highlights the value of examining individual components of ethnic identity, as opposed to using composite measures of the construct.

For Hypothesis 5, it was expected that the relationship between FECS and EI affirmation would be moderated by phenotype characteristics among Latinos. Contrary to the findings of

Gonzales-Backen and Umaña-Taylor (2011), this investigation failed to find any moderation of the FECS–EI affirmation relationship by phenotype characteristic variables. None of the indices of physical appearance (i.e., skin tone, Latino appearance, European appearance, African American appearance) functioned as statistically significant moderators in the regression models. Further analyses using age and family composition as control variables did not alter the non-significant results. These results should be interpreted with caution, given the study's small sample size (Latino sample n size = 61). The moderation effect sizes for both the Gonzales-Backen and Umaña-Taylor study and the current study were low. Post hoc power analyses were conducted using G*Power (Faul, Erdfelder, Buchner, & Lang, 2009); it was determined that the study's power to detect the relations between physical appearance x FECS and EI affirmation ranged from .07 to .41. Post-hoc analyses were conducted to probe the FES x Skin Tone interaction, which was found to be approaching significance. These results were in line with expectations—the relationship between FES and EI affirmation was stronger among Latinos with darker, compared to lighter, skin tones.

While the lack of significant moderation may be the result of low statistical power, there are other explanatory factors to consider. The discrepancies between this study's findings and those of previous research on EI affirmation may be the result of contextual factors tied to ethnic identity development. These include high school ethnic composition, perceived neighborhood risk, and parental factors. Supple et al. (2006) reported that among metropolitan-living Californian Latino adolescents, there were effects of parenting variables, neighborhood risk, and neighborhood Latino ethnic percentage on adolescents' EI affirmation. These researchers did not find that FES predicted EI affirmation; however, it was found that higher levels of harsh

parenting were associated with lower levels of EI affirmation. Moreover, harsh parenting interacted with FES such that lower levels of EI affirmation were associated with higher levels of FES when there were high levels of harsh parenting. Supple et al. (2006) also reported that parental involvement interacted with FES to predict EI affirmation. Higher levels of FES predicted higher levels of EI affirmation when there were higher levels of parental involvement. It is possible that the statistically significant relationship between FECS and EI affirmation found in this study is due to higher levels of parental involvement in this sample and/or lower levels of harsh parenting, compared to previous studies. Relatedly, Kiang, Witkow, Baldelomar, and Fuligni (2010) reported that among Latino, Asian, and European American adolescents, higher levels of family cohesion (i.e., feelings of closeness to parents) were related to higher levels of adolescents' ethnic identity affirmation and belonging. These studies underscore the importance of considering parent-child relationship factors when examining ethnic identity development. Research also suggests ethnic identity affirmation is linked to characteristics of youths' environments, in terms of neighborhood and school characteristics.

Supple and colleagues (2006) found that perceived neighborhood risk had a direct negative effect on EI affirmation and it also moderated the FES–EI affirmation relationship. Specifically, the relationship was significant and positive when perceived neighborhood risk was low, and significant and negative when perceived neighborhood risk was high. Further research should explore these relationships to better understand how neighborhood risk perceptions influence the extent to which one feels negatively or positively about one's ethnic group membership.

Another neighborhood factor examined by Supple and others (2006) was neighborhood Latino population percentage. These researchers found that living in neighborhoods with higher numbers of Latino residents was associated with higher levels of EI affirmation. In the Kiang et al. (2010) study, higher levels of ethnic identity affirmation were associated with greater proportions of same-ethnic peers in school as well as greater proportions of same-ethnic friends within friendship groups. In terms of the current investigation, these findings might be particularly relevant. Gonzales-Backen and Umaña-Taylor (2011) used a predominantly high school senior student sample (mean age = 18.2 years); 36.5 percent of the sample was one year post-high school. The participants were recruited from high schools that did not have populations that were above 20% Latino. In contrast, follow-up analyses in the current investigation showed that the average Latino population percentage in participants' high schools was 48.24% (SD=29.02). Latino participants who had attended Latino-majority high schools made up 54.1% of the sample. The lack of moderation by phenotype characteristics reported in this study is possibly due to the high school ethnic group composition differences between the two studies. It has been proposed that EI affirmation may be related to development within a same-ethnic peer context, such that when a Latino adolescent attends a Latino-majority high school and receives social support from same-ethnic peers, high levels of affirmation may develop (Pahl & Way, 2006). The findings regarding neighborhood ethnic composition found by Supple et al. (2006) as well as the current study's discovery of a FES–EI affirmation linkage might be related to this process. In light of the previous and current findings, perhaps ethnic identity affirmation development is advanced when family ethnic cultural socialization is experienced in conjunction with being within an ethnic group majority during adolescence.

Future research should examine the relation between ethnic identity and ethnic group composition contexts.

Another line of EI research warrants consideration of EI affirmation among college student samples. Numerous scholars have reported linkages between ethnic identity, EI affirmation in particular, and academic outcomes (for a review, see Rivas-Drake et al., 2014). The previously mentioned Supple et al. (2006) study reported that higher levels of EI affirmation were related to higher levels of academic achievement, but that EI exploration and EI resolution were unrelated to this outcome among high school adolescents. These results raise the question of study comparability in terms of high school and college student Latino samples. The relationships suggest that Latino college students might have higher levels of EI affirmation than high school students. Presumably, high school students with higher levels of EI affirmation and, thus, higher levels of academic achievement, would be more likely to attend college. EI affirmation differences such as this could explain the difference in moderation results between the Gonzales-Backen and Umaña-Taylor (2011) study and the current investigation. It was found that the mean level of EI affirmation was higher in the current study (M = 3.90; SD = .23) than in the Gonzales-Backen and Umaña-Taylor study (M = 3.78; SD = .48). Given the higher mean and lower standard deviation, in comparison with Gonzales-Backen and Umaña-Taylor's data, as well as the negative skewness and high kurtosis of the EI affirmation variable, it is possible that a ceiling effect played a role in the non-significant findings.

Future research should longitudinally examine the relationships between ethnic identity, academic achievement, and college attendance. At a minimum, future research that attempts to

replicate the Gonzales-Backen and Umaña-Taylor (2011) findings among college students should also include a community (non-student) subsample for comparison.

Research Question #3 examined whether the relationship between FECS and either EI exploration or EI resolution would be moderated by phenotype characteristics among Latinos. No robust evidence of moderation was found. Although initial evidence suggested that the FECS–EI resolution linkage is moderated by African American appearance, further analyses using a transformed dependent variable to correct for negative skewness resulted in the loss of statistical significance, making a claim for moderation questionable. With the exception of this tenuous finding, results for Research Question #3 are consistent with the findings in the original study. It appears that family practices in terms of cultural heritage and pride predict EI exploration and resolution in youth, regardless of whether their physical appearance is congruent with ethnic appearance stereotypes.

A few comparisons between the current study and that of Gonzales-Backen & Umaña-Taylor (2011) are worth mentioning. In the current investigation, 62.3% of Latinos were Mexican, compared to 71.9% in Gonzales-Backen & Umaña-Taylor's sample. This is potentially important because, given that Latino is a pan-ethnic group, there may be within-group variation in the form and frequency of FECS practices and this might account for the significant relationship found between FECS and EI affirmation. In terms of phenotype characteristics, there is a possibility that ethnic appearance does not play the same role in the relationship between FECS and EI affirmation among non-Mexican Latinos as it does among Mexican Latinos. Additionally, 95.1% of this study's Latino sample was born in the U.S., compared to 73.1% in the Gonzales-Backen & Umaña-Taylor sample. Previous research by Umaña-Taylor

and Fine (2004) found that higher levels of U.S. nativity within families is associated with lower levels of FECS among adolescent Latinos. This would seem to be at odds with the fact that the mean level of FECS in the Gonzales-Backen and Umaña-Taylor study was 3.78 (*SD* = .99) and the current study found a mean of 4.03 (*SD* = .88). However, this might be explained by the finding that middle SES parents, compared to low and high SES parents, report the highest levels of FECS (Hughes et al., 2008). The current study used a public university student sample that might have selected for participants from middle SES backgrounds. In terms of family composition, the percentages of participants who grew up with both parents in the home were 75.4% and 68.9%, respectively, in the current study and Gonzales-Backen and Umaña-Taylor's study. Although research is needed on the role that family composition plays in relation to FECS and EI, this author suggests that the experience of being a single parent might influence the degree to which one engages in FECS practices. Presumably, the added responsibility and time constraints that can be associated with single parenting, compared to co-parenting, might reduce the extent that one has the time or financial resources to engage in FECS behaviors with their children, especially those related to ethnic events (e.g., attending a cultural pride festival) and media exposure (e.g., viewing an ethnic-related film). Future research should examine whether single parents, compared to parents in two-parent homes, engage in FECS practices less often.

Research Question #4 examined whether the relationship between FECS and any component of EI would be moderated by physical appearance among African Americans. Consistent with the findings among Latinos, no evidence of moderation was found. Again, these results should be interpreted with caution given the small sample size used; the African

American subsample size was 64. Statistical power to detect relations between interaction terms and EI affirmation was low (e.g., .24 for skin tone x FECS and EI affirmation).

FECS, EI, and Self-esteem

Previous research has reported linkages between self-esteem and both FECS and EI (Hughes et al., 2009; Smith & Silva, 2011). Hypothesis #2 examined whether FECS is associated with self-esteem. It was found that higher levels of FECS were associated with higher levels of self-esteem. Hypothesis #3 examined whether EI is associated with self-esteem. Results showed that higher levels of ethnic identity were associated with higher levels of self-esteem among college students. EI exploration and EI resolution were associated with self-esteem while EI affirmation was not. The lack of significant findings for EI affirmation might be due to a ceiling effect or the poor internal consistency obtained using the EI affirmation subscale (Cronbach's alpha = .59). It is possible that a more reliable measure would have enabled the detection of a statistically significant relationship between self-esteem and EI affirmation.

Based on social identity theory, it was expected that the relationship between FECS and self-esteem would be mediated by EI affirmation. This relationship was not found. However, results revealed that the FECS–self-esteem relationship was mediated by EI exploration and EI resolution. In terms of considering the lack of significant mediation by EI affirmation, this might be due to the reliability issue mentioned above. However, previous research suggests that the affirmation–self-esteem relationship might be dependent on the age of the individual (Toomey & Umaña-Taylor, 2012). Umaña-Taylor et al. (2004) reported a significant relationship between EI affirmation and self-esteem among high school students; however, no such relationship was

found among college students. The latter finding is consistent with the results of this investigation. These findings might be related to the high school–college student sample differences that were previously discussed. One plausible explanation for the lack of association between EI affirmation and self-esteem among college students is that college students, compared to high school students, have higher levels of EI affirmation; there might be less variability in EI affirmation among college students, thus influencing statistical results. Other explanations for the inconsistent findings have been suggested. It has been proposed that contextual factors such as school ethnic composition and the salience of other aspects of identity (e.g., gender identity) should be considered when examining this complex relationship (Toomey & Umaña-Taylor, 2012).

Limitations and Directions for Future Research

There are several limitations to this study. The cross-sectional nature of the study precludes causal interpretations. Future research should employ longitudinal designs to address these lines of research. Another limitation of this study is its small sample size. It is quite possible that the small sample size resulted in the inability to detect relationships that were actually present. Follow-up analyses revealed that a sample size of 158 Latino participants would have been required in order for the skin tone moderation analysis to reach statistical significance. The single-informant design of the study is also a limitation. Follow-up research would benefit from using multiple-informant designs that include parental reports; this might more accurately capture family ethnic socialization.

Another limitation pertains to the analyses that used the full sample. Correlation analyses revealed that some of the study's variables were significantly correlated in one ethnic group but not the other. For example, self-esteem was correlated with FECS but only among African Americans. The linkage between FECS and self-esteem was tested using the full sample in this study. Future research should examine the relationships between FECS and self-esteem more carefully by investigating ethnic group differences in that linkage. On a related note, this study found that there were mean differences between the ethnic groups on a few key variables. Latinos had higher levels of FECS and EI affirmation than African Americans. Taken together with the bivariate correlation results, this underscores the importance of considering group differences in ethnic minority research.

The generalizability of this study is limited. The sample was comprised entirely of college students. Much of the literature on EI among adults is based on data from college student samples. There could be differences in college student and non-college student populations with respect to their experiences with FECS and EI development. A few research questions that might be examined, as well as rationales for doing so, are: Does ethnic identity affirmation longitudinally predict college attendance? If so, this could have implications for public education policies. Are there differences among college students and non-college student adults with respect to the relationship between ethnic identity and self-esteem? Thus far, primarily college student samples have been used in EI research, limiting our overall empirical knowledge of the construct and its relations to other variables.

Another generalizability issue concerns the way in which ethnicity was handled in this investigation. Latino is a pan-ethnic group, that is, it is comprised of many ethnic groups. This

study examined ethnic identity pan-ethnically; although Mexican-Americans made up the largest group, other ethnic groups within the sample included Puerto Rican, Salvadorian, Ecuadorian, and others. When examining EI and its correlates this way, Latino within-group variability is obscured. Scholars have suggested that it is important for EI research to examine EI across different Latino subgroups in order to more accurately analyze developmental processes (Gonzales-Backen & Umaña-Taylor, 2011). Scholars have pointed out that different Latino groups have different immigration histories and this variability may influence ethnic identity (Umaña-Taylor, Diversi, & Fine, 2002). For example, as Mexican immigration has a long history within the U.S., Latinos from this group may be more likely to have family living in their areas. This could influence experiences with social support and role models and, through these factors, affect ethnic identity development (Umaña-Taylor et al., 2002). EI scholars have also cited demographic differences, including income, poverty, and educational attainment, across Latino ethnicities as a reason why these groups should not be considered as one homogenous group (Umaña-Taylor et al., 2002). Additionally, and pertinent to the analyses in this study, Latino group might be related to ethnic appearance. Due to differing population histories, Latino ethnicities may differ in terms of variations in skin tone, hair texture, etc. (e.g., some Latino groups may have more skin tone variation—very light tones to very dark tones—while others may exhibit less variability). Researchers interested in ethnic appearance in relation to ethnic identity should take into account these potential variations among Latino groups.

Future research should examine the role of different family ethnic socialization dimensions in the relationships between FECS, EI, physical appearance, and self-esteem. This investigation only examined one dimension—cultural socialization; however, there could be

contributions to self-esteem and EI development from practices that communicate messages about ethnic discrimination or that promote wariness of other ethnic groups.

REFERENCES

Altschul, I., Oyserman, D., & Bybee, D. (2006). Racial-ethnic identity in mid-adolescence: Content and change as predictors of academic achievement. *Child Development, 77*, 1155-1169.

Arce, C. (1981). A reconsideration of Chicano culture and identity. *Daedalus*, *110*, 177-192.

Atkinson, D., Morten, G., & Sue, D. (1983). *Counseling American minorities*. Dubuque, IA: W. C. Brown.

Banerjee, M., Harrell, Z., & Johnson, D. (2011). Racial/ethnic socialization and parental involvement in education as predictors of cognitive ability and achievement in African American children. *Journal of Youth and Adolescence, 40*, 595-605.

Bronfenbrenner, U. (1989). Ecological systems theory. *Annals of Child Development, 6,* 187-249.

Cohen, J., Cohen, P., West, S. G., & Aiken, L. S. (2003). *Applied multiple regression/correlation analysis for the behavioral sciences*. Mahwah, NJ: Lawrence Erlbaum.

Cokley, K. (2007). Critical issues in the measurement of ethnic and racial identity: A referendum on the state of the field. *Journal of Counseling Psychology, 54*, 224-234.

Cokley, K., & Helm, K. (2001). Testing the construct validity of scores on the Multidimensional Inventory of Black Identity. *Measurement and Evaluation in Counseling and Development, 34*, 80-95.

Côté, J. E. (2009). Identity formation and self-development in adolescence. In R. Lerner & L. Steinberg (Eds.), *Handbook of adolescent psychology* (3rd ed.)(pp. 269-304). New York, NY: Wiley.

Cross, W. (1978). The Thomas and Cross models of psychological nigrescence: A literature review. *Journal of Black Psychology, 4*, 13-31.

Erikson, E. (1959). Late adolescence . In D. H. Funkenstein (Ed.), *The student and mental health: An international view* (pp. 66-106). Cambridge, MA: Riverside.

Erikson, E. (1968). *Identity: Youth and crisis*. New York, NY: Norton.

Erikson, E. (1980). *Identity and the life cycle*. New York, NY: Norton.

Erikson, E., & Erikson, J. (1998). *The life cycle completed*. New York, NY: Norton.

Faul, F., Erdfelder, E., Buchner, A., & Lang., A. (2009). Statistical power analyses using G*Power 3.1: Tests for correlation and regression analyses. *Behavior Research Methods, 41*, 1149-1160.

Feldt, L., Woodruff, D., & Salih, F. (1987). Statistical inference for coefficient alpha. *Applied Psychological Measurement, 11*, 93-103.

French, S., Seidman, E., Allen, L., & Aber, L. (2006). The development of ethnic identity during adolescence. *Developmental Psychology, 42*, 1-10.

García Coll, C., Lamberty, G., Jenkins, R., McAdoo, H. P., Crnic, K., Wasik, B. H., & Garcia, H. V. (1996). An integrative model for the study of developmental competencies in minority children. *Child Development, 67*, 1891-1914.

Gonzales-Backen, M. A., & Umaña-Taylor, A. J. (2011). Examining the role of physical appearance in Latino adolescents' ethnic identity. *Journal of Adolescence, 34*, 151-162.

Grant, J. (2008). The relationship between ethnic identity and psychological health: A meta-analytic review (Doctoral dissertation). Retrieved from http://scholarly repository. miami.edu/oa_dissertations/160

Grotevant, H. D. (1987). Toward a process model of identity formation. *Journal of Adolescent Research, 2,* 203-222.

Heatherton, T. F. & Wyland, C. (2003). Assessing self-esteem. In S. Lopez & R. Snyder (Eds.), *Assessing positive psychology* (pp. 219-233). Washington, DC: APA.

Helms, J., & Cook, D. (1999). *Using race and culture in counseling and psychotherapy: Theory and process.* Needham Heights, MA: Allyn & Bacon.

Hughes, D., Rivas, D. Foust, M., Hagelskamp, C., Gersick, S., & Way, N. (2008). How to catch a moonbeam: A mixed-methods approach to understanding ethnic socialization in ethnically diverse families. In S. Quintana & C. McKnown (Eds.), *Handbook of race, racism, and child development* (pp. 226-277). Hoboken, NJ: Wiley.

Hughes, D., Rodriguez, J., Smith, E., Johnson, D., Stevenson, H., & Spicer, P. (2006). Parents' ethnic-racial socialization practices: A review of research and directions for future study. *Developmental Psychology, 42*, 747-770.

Hughes, D., Witherspoon, D., Rivas-Drake, D., & West-Bey, N. (2009). Received ethnic-racial socialization messages and youths' academic and behavioral outcomes: Examining the mediating role of ethnic identity and self-esteem. *Cultural Diversity and Ethnic Minority Psychology, 15*, 112-124.

Huynh, V., & Fuligni, A. (2008). Ethnic socialization and the academic achievement of adolescents from Mexican, Chinese, and European backgrounds. *Developmental Psychology, 44*, 1202-1208.

Kalsner, L., & Pistole, C. (2003). College adjustment in a multiethnic sample: Attachment, separation-individuation, and ethnic identity. *Journal of College Student Development, 44,* 92-109.

Khanna, N. (2004). The role of reflected appraisals in racial identity: The case of multiracial Asians. *Social Psychology Quarterly, 67,* 115-131.

Kiang, L., & Takeuchi, D. T. (2009). Phenotypic bias and ethnic identity in Filipino Americans. *Social Science Quarterly, 90*, 428-445.

Kiang, L., Witkow, M., Baldelomar, O., & Fuligni, A. (2010). Change in ethnic identity across the high school years among adolescents with Latin American, Asian, and European backgrounds. *Journal of Youth Adolescence, 39,* 683-693.

Kim, J. (1981). *The process of Asian-American identity development: A study of Japanese American women's perceptions of their struggle to achieve positive identities* (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses database. (UMI No. 8118010)

Kroger, J. (2003). Identity development during adolescence. In G. R. Adams & M. D. Berzonsky (Eds.), *The Blackwell handbook of adolescence* (pp. 205-226). Oxford, UK: Blackwell.

Lee, R., & Yoo, H. (2004). Structure and measurement of ethnic identity for Asian American college students. *Journal of Counseling Psychology, 51*, 263-269.

Marcia, J. (1966). Development and validation of ego identity statuses. *Journal of Personality and Social Psychology, 3*, 551-558.

Marcia, J. (1980). Identity in adolescence. In J. Adelson (Ed.), *Handbook of adolescent psychology* (pp. 159-187). New York, NY: Wiley.

McGill, R. B. (2009). *Peer ethnic socialization: Prevalence, predictors, and outcomes among African-American adolescents* (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses database. (UMI No. 3371991)

Pahl, K., & Way, N. (2006). Longitudinal trajectories of ethnic identity among urban Black and Latino adolescents. *Child Development, 77*(5), 1403-1415.

Phinney, J. (1989). Stages of ethnic identity development in minority group adolescents. *Journal of Early Adolescence, 9*, 34-49.

Phinney, J. (1990). Ethnic identity in adolescents and adults: Review of research. *Psychological Bulletin, 108*(3), 499-514.

Phinney, J. S. (1991). Ethnic identity and self-esteem: A review and integration. *Hispanic Journal of Behavioral Sciences, 13*, 193-208.

Phinney, J. (1992). The Multigroup Ethnic Identity Measure: A new scale for use with diverse groups. *Journal of Adolescent Research, 7,* 156-176.

Phinney, J. (2006). Ethnic identity exploration in emerging adulthood. In J. Arnett & J. Tanner (Eds.), *Emerging adults in America: Coming of age in the 21st century* (pp. 117-134). Washington, DC: American Psychological Association.

Phinney, J., & Ong, A. (2007). Conceptualization and measurement of ethnic identity: Current status and future directions. *Journal of Counseling Psychology, 54*, 271-281.

Preacher, K., & Hayes, A. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior Research Methods, 40*, 879-891.

Reinhard, C. M. (2010). Effects of peer & familial ethnic socialization on processes of ethnic identity development in Mexican-descent adolescents (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses database. (UMI No. 3411941)

Rivas-Drake, D. (2011). Ethnic-racial socialization and adjustment among Latino college students: The mediating roles of ethnic centrality, public regard, and perceived barriers to opportunity. *Journal of Youth and Adolescence, 40*, 606-619.

Rivas-Drake, D., Seaton, E., Markstrom, C., Quintana, S., Syed, M., Lee, R., Schwartz, S., Umaña-Taylor, A., French, S., Yip, T., & Ethnic and Racial Identity in the 21st Century Study Group. (2014). Ethnic and racial identity in adolescence: Implications for psychosocial, academic, and health outcomes. *Child Development, 85,* 40-57.

Roberts, R. E., Phinney, J. S., Masse, L. C., Chen, Y. R., Roberts, C. R., & Romero, A. (1999). The structure of ethnic identity of young adolescents from diverse ethnocultural groups. *Journal of Early Adolescence, 19*, 301-322.

Robins, R., Hendin, H., & Trzesniewski, K. (2001). Measuring global self-esteem: Construct validation of a single-item measure and the Rosenberg Self-Esteem Scale. *Personality and Social Psychology Bulletin, 27,* 151-161.

Rosenberg, M. (1965). *Society and the adolescent self-image*. Princeton, NJ: Princeton University Press.

Schmitt, D., & Allik, J. (2005). Simultaneous administration of the Rosenberg Self-Esteem Scale in 53 nations: Exploring the universal and culture-specific features of global self-esteem. *Journal of Personality and Social Psychology, 89*, 623-642.

Schwartz, S. J. (2001). The evolution of Eriksonian and neo-Eriksonian identity theory and research: A review and integration. *Identity: An International Journal of Theory and Research, 1*(1), 7-58.

Schwartz, S. (2002). In search of mechanisms of change in identity development: Integrating the constructivist and discovery perspectives on identity. *Identity: An International Journal of Theory and Research, 2*, 317-339.

Seaton, E., Scottham, K., & Sellers, R. (2006). The status model of racial identity development in African American adolescents: Evidence of structure, trajectories, and well-being. *Child Development, 77*, 1416-1426.

Sellers, R. M., Rowley, S. A. J., Chavous, T. M., Shelton, J. N., & Smith, M. A. (1997). Multidimensional Inventory of Black Identity: A preliminary investigation of reliability and construct validity. *Journal of Personality and Social Psychology, 73*, 805-815.

Sellers, R. M., Smith, M. A., Shelton, J. N., Rowley, S., & Chavous, T. M. (1998). Multidimensional Model of Racial Identity: A reconceptualization of African American racial identity. *Personality and Social Psychology Review, 2*, 18-39.

Smith, T., & Silva, L. (2011). Ethnic identity and personal well-being of people of color: A meta-analysis. *Journal of Counseling Psychology*, *58*, 42-60.

Supple, A., Ghazarian, S., Frabutt, J., Plunkett, S., & Sands, T. (2006). Contextual influences on Latino adolescent ethnic identity and academic outcomes. *Child Development, 77*, 1427-1433.

Syed, M., & Azmitia, M. (2008). A narrative approach to ethnic identity in emerging adulthood: Bringing life to the identity status model. *Developmental Psychology, 44*, 1012-1027.

Tajfel, H. (1974). Social identity and intergroup behaviour. *Social Science Information, 13*, 65-93.

Tajfel, H. (1981). *Human groups and social* categories. Cambridge, UK: Cambridge University Press.

Tajfel, H. (1982). *Social identity and intergroup relations*. Cambridge, UK: Cambridge University Press.

Tajfel, H., & Turner, J. C. (1979). An integrative theory of intergroup conflict. In W. G. Austin & S. Worchel (Eds.), *The social psychology of intergroup relations* (pp. 33-47). Monterey, CA: Brooks-Cole.

Toomey, R., & Umaña-Taylor, A. (2012). The role of ethnic identity on self-esteem for ethnic minority youth: A brief review. *Prevention Researcher, 19,* 8-12.

Umaña-Taylor, A. J., Alfaro, E. C., Bamaca, M. Y., & Guimond, A. B. (2009). The central role of family socialization in Latino adolescents' cultural orientation. *Journal of Marriage and Family, 71*, 46-60.

Umaña-Taylor, A. J., Diversi, M., & Fine, M. (2002). Ethnic identity and self-esteem of Latino adolescents: Distinctions among the Latino populations. *Journal of Adolescent Research, 17,* 303-327.

Umaña-Taylor, A. & Guimond, A. (2010). A longitudinal examination of parenting behaviors and perceived discrimination predicting Latino adolescents' ethnic identity. *Developmental Psychology, 46*, 636-650.

Umaña-Taylor, A. J., Yazedjian, A., & Bamaca-Gomez, M. (2004). Developing the Ethnic Identity Scale using Eriksonian and social identity perspectives. *Identity, 4,* 9-38.

U.S. Census Bureau. (2011, March). *Overview of Race and Hispanic origin: 2010.* Retrieved from http://www.census.gov/prod/cen2010/briefs/c2010br-02.pdf

U.S. Census Bureau. (2012, May 17*). Most children younger than age 1 are minorities, Census Bureau reports*. Retrieved from http://www.census.gov/newsroom/releases/archives/population/cb12-90.html

Yoon, E. (2011). Measuring ethnic identity in the Ethnic Identity Scale and the Multigroup Ethnic Identity Measure-Revised. *Cultural Diversity and Ethnic Minority Psychology, 17,* 144-155.

APPENDIX A

CONSENT FORM

Consent Form

The purpose of this research project titled "An Examination of Parental and Individual Factors in Association with Ethnic Identity," being conducted by Cara Allen, a graduate student at Northern Illinois University (NIU), is to examine the relationships between parenting practices and feelings relating to ethnicity and oneself among emerging adults in college. You must be at least 18 years old to participate in this study. This study will be completed in the NIU psychology department lab of Dr. Nina Mounts.

In this study, you will be asked to answer demographic questions about yourself such as your age, sex, and ethnicity, as well as some questions about your parents such as their ethnicity, country of birth, and education level. You will be asked to complete other questionnaires that ask you about your feelings about your ethnicity and yourself in general, as well as your parents' parenting practices related to ethnicity.

Participation in this study involves having one photograph of yourself taken. The photograph will capture your image from the shoulders and above, similar to a driver's license photograph. As this study is on parenting and personal factors relating to ethnicity, your ethnic appearance will be assessed using the photographs. You will also be asked to complete a questionnaire that asks you to assess your ethnic appearance.

It is possible that by having your photograph taken you might feel uncomfortable. It is also possible that when answering some of the questions in this study you might experience some negative emotions or thoughts. If you feel upset during or after the study, you may contact the experimenter. If you wish, the experimenter can make a referral to a counseling agency in the area.

The session should last approximately 45 minutes to one hour. When you have completed the study, you will receive more information about the purpose of the study. All of the information you provide will be kept confidential. Only the researchers conducting the study will have access to the data you provide. Your information will only be identified by a code number assigned to you, which will be kept in a locked cabinet in the lab of Dr. Nina Mounts at NIU.

By completing this study, you will earn 2 points toward the partial course credit option in your Psychology 102 course. Your participation in this study will contribute to our understanding of parenting and feelings pertaining to the self. Your participation in this study is completely voluntary. If you agree to participate but later change your mind for any reason, you may withdraw from the study at any time without penalty. You may also choose to skip any part of the study. You will not lose points if you do not complete the study. The researchers will answer any questions you may have about the study. Any further information about the study may be obtained

by contacting Cara Allen or Dr. Nina Mounts, Department of Psychology, Northern Illinois University, at (815) 298-7556 or (815) 753-6968. If you have questions about your rights as a research participant, please contact the NIU Office of Research Compliance, (815) 753-8588.

After you have read this form in its entirety and understood the purpose and conditions of the study, and if you agree to participate in this study, please fill out of following information below:

Your Name

Today's Date _____

Permission for photograph to be taken:

Your Name

Today's Date _____

APPENDIX B

DEBRIEFING FORM

Debriefing Form

Thank you very much for taking the time to complete this study. The purpose of this study is to investigate the role of family ethnic socialization (i.e. how families socialize their children as members of an ethnic group) in predicting outcomes such as ethnic identity and self-esteem. Previous research has found that higher levels of family ethnic socialization predict ethnic identity and self-esteem.

In this study, researchers assessed your phenotype characteristics (i.e. your physical characteristics) with respect to your skin tone and ethnic appearance (i.e. the extent to which you appeared to be Latino/a, African-American, or European American). Previous research has found phenotype characteristics play a role in the relationship between family ethnic socialization and ethnic identity among Latino/a adolescents. One purpose of this study was to test whether this occurs in both Latino/a and African-American college students.

You may choose to withdraw your data at any time without penalty.

Question to ask participants

Are you feeling okay about your participation in this study or would you like to discuss it?

Provide list of counseling resources

APPENDIX C

ETHNIC IDENTITY SCALE

The U.S. is made up of people of various ethnicities. Ethnicity refers to cultural traditions, beliefs, and behaviors that are passed down through generations. Some examples of the ethnicities that people may identify with are Mexican, Cuban, Nicaraguan, Chinese, Taiwanese, Filipino, Jamaican, African American, Haitian, Italian, Irish, and German. In addition, some people may identify with more than one ethnicity. When you are answering the following questions, we'd like you to think about what YOU consider your ethnicity to be.

Please write what you consider to be your ethnicity here _____ and refer to this ethnicity as you answer the questions below.

	Does not describe me at all	**Describes me a little**	**Describes me well**	**Describes me very well**
1. My feelings about my ethnicity are mostly negative.	1	2	3	4
2. I have not participated in any activities that would teach me about my ethnicity.	1	2	3	4
3. I am clear about what my ethnicity means to me.	1	2	3	4
4. I have experienced things that reflect my ethnicity, such as eating food, listening to music, and watching movies.	1	2	3	4
5. I have attended events that have helped me learn more about my ethnicity	1	2	3	4
6. I have read books/magazines/newspapers or other materials that have taught me about my ethnicity.	1	2	3	4
7. I feel negatively about my ethnicity.	1	2	3	4
8. I have participated in activities that have exposed me to my ethnicity	1	2	3	4
9. I wish I were of a different ethnicity	1	2	3	4
10. I am not happy with my ethnicity.	1	2	3	4
11. I have learned about my ethnicity by doing things such as reading (books, magazines, newspapers), searching the internet, or keeping up with current events.	1	2	3	4
12. I understand how I feel about my ethnicity.	1	2	3	4
13. If I could choose, I would prefer to be of a different ethnicity.	1	2	3	4
14. I know what my ethnicity means to me.	1	2	3	4
15. I have participated in activities that have taught me about my ethnicity.	1	2	3	4
16. I dislike my ethnicity.	1	2	3	4
17. I have a clear sense of what my ethnicity means to me.	1	2	3	4

APPENDIX D

FAMILIAL ETHNIC SOCIALIZATION MEASURE

Please rate (between 1 and 5) how much you agree with each of the following items.

	1 = Not at all				***5 = Very much***
1. My family teaches me about my ethnic/cultural background.	1	2	3	4	5
2. My family encourages me to respect the cultural values and beliefs of our ethnic/cultural background.	1	2	3	4	5
3. My family participates in activities that are specific to my ethnic group.	1	2	3	4	5
4. Our home is decorated with things that reflect my ethnic/cultural background.	1	2	3	4	5
5. The people who my family hangs out with the most are people who share the same ethnic background as my family.	1	2	3	4	5
6. My family teaches me about the values and beliefs of our ethnic/cultural background.	1	2	3	4	5
7. My family talks about how important it is to know about my ethnic/cultural background.	1	2	3	4	5
8. My family celebrates holidays that are specific to my ethnic/cultural background.	1	2	3	4	5
9. My family teaches me about the history of my ethnic/cultural background.	1	2	3	4	5
10. My family listens to music sung or played by artists from my ethnic/cultural background.	1	2	3	4	5
11. My family attends things such as concerts, plays, festivals, or other events that represent my ethnic/cultural background.	1	2	3	4	5
12. My family feels a strong attachment to our ethnic/cultural background.	1	2	3	4	5

APPENDIX E

ROSENBERG SELF-ESTEEM SCALE

The next questions ask about your current feelings about yourself. For each of the following, please circle the number that corresponds with the answer that best describes how strongly you agree or disagree with the statement about yourself now.

	Strongly Agree 4	**Agree 3**	**Disagree 2**	**Strongly Disagree 1**
1. On the whole I am satisfied with myself.				
2. At times I think I am no good at all.				
3. I feel I have a number of good qualities.				
4. I am able to do things as well as most other people.				
5. I feel I do not have much to be proud of.				
6. I certainly feel useless at times.				
7. I feel that I am a person of worth at least on an equal plane with others.				
8. I wish I could have more respect for myself.				
9. All in all I am inclined to feel that I am a failure.				
10. I take a positive attitude towards myself.				

APPENDIX F

APPEARANCE RATING SHEET

RCODE _____

1. This individual's skin color is:

1 2 3 4 5 6 7 8 9 10 11

Very light Very dark

2. This person looks:

1 2 3 4 5 6 7 8 9

Not at all Latino/a Very Latino/a

3. This person looks:

1 2 3 4 5 6 7 8 9

Not at all European Very European

4. This person looks:

1 2 3 4 5 6 7 8 9

Not at all African Very African

5. This person looks:

1 2 3 4 5 6 7 8 9

Not at all ethnic Very ethnic

6. Based on his/her appearance, this individual appears to be: _____

a) European American/non-Hispanic White
b) Latino/Hispanic
c) African American
d) Asian American
e) Native American

APPENDIX G

DEMOGRAPHIC QUESTIONNAIRE

Demographic Questionnaire

1. What is today's date? _____/_____/_____
month day year

2. What is your date of birth? _____/_____/_____
month day year

3. What sex are you? (circle one)

Female Male

4. What is your academic status at NIU? (circle one)

Freshmen Sophomore Junior Senior

5. Are you Hispanic/Latino? (circle one)

No, not Hispanic/Latino

Yes, White Hispanic/Latino

Yes, Non-white Hispanic/Latino

6. What is your ethnicity? (circle one or more)

European American	Asian Indian
Black or African American	Chinese
American Indian or Alaska Native	Japanese
Mexican, Mexican American, or Chicano	Korean
Puerto Rican	Filipino
Cuban	Vietnamese
Other Hispanic/Latino ethnicity	Other Asian ethnicity

7. What is your mother's ethnicity? (circle one or more)

European American	Asian Indian
Black or African American	Chinese
American Indian or Alaska Native	Japanese
Mexican, Mexican American, or Chicano	Korean
Puerto Rican	Filipino
Cuban	Vietnamese
Other Hispanic/Latino ethnicity	Other Asian ethnicity

8. What is your father's ethnicity? (circle one or more)

European American	Asian Indian
Black or African American	Chinese
American Indian or Alaska Native	Japanese
Mexican, Mexican American, or Chicano	Korean
Puerto Rican	Filipino
Cuban	Vietnamese
Other Hispanic/Latino ethnicity	Other Asian ethnicity

9. What is your maternal grandmother's (your mother's mother's) ethnicity? (circle one or more)

European American	Other Hispanic/Latino ethnicity
Black or African American	Asian Indian
American Indian or Alaska Native	Chinese
Mexican, Mexican American, or Chicano	Japanese
Puerto Rican	Korean
Cuban	Filipino

Vietnamese

Other Asian ethnicity

10. What is your maternal grandfather's (your mother's father's) ethnicity? (circle one or more)

European American

Black or African American

American Indian or Alaska Native

Mexican, Mexican American, or Chicano

Puerto Rican

Cuban

Other Hispanic/Latino ethnicity

Asian Indian

Chinese

Japanese

Korean

Filipino

Vietnamese

Other Asian ethnicity

11. What is your paternal grandmother's (your father's mother's) ethnicity? (circle one or more)

European American

Black or African American

American Indian or Alaska Native

Mexican, Mexican American, or Chicano

Puerto Rican

Cuban

Other Hispanic/Latino ethnicity

Asian Indian

Chinese

Japanese

Korean

Filipino

Vietnamese

Other Asian ethnicity

12. What is your paternal grandfather's (your father's father's) ethnicity? (circle one or more)

European American

Black or African American

American Indian or Alaska Native

Mexican, Mexican American, or Chicano

Puerto Rican

Cuban

Other Hispanic/Latino ethnicity

Asian Indian

Chinese

Japanese

Korean

Filipino

Vietnamese

Other Asian ethnicity

13. Please give the location of birth (State/Province, Country) for the following people:

Yourself: _____

Your mother:_____

Your father:_____

Your maternal grandmother (your mother's mother):_____

Your maternal grandfather (your mother's father):_____

Your paternal grandmother (your father's mother):_____

Your paternal grandfather (your father's father):_____

14. What is the primary language spoken in your family's home?

_____

15. Which parents or guardians did you live with as a child? (circle one)

Mother and father in the same home

Some time with mother, some time with father

Mother

Father

Mother and stepfather

Father and stepmother

Other (please specify): _____

16. What is your family's yearly income? (circle one)

less than $20,000

$20,000-$30,000

$30,001-$40,000

$60,001-$70,000

$70,001-$80,000

$80,001-$90,000

$40,001-$50,000	$90,001-$100,000
$50,001-$60,000	greater than $100,000

17. Circle the HIGHEST level of education completed by your mother: (circle one)

Some grade school	4-year college degree
Finished grade school	Some school beyond college
Some high school	Professional or graduate degree
Finished high school	Don't know
Some college or 2-year degree	Does not apply

18. Circle the HIGHEST level of education completed by your father: (circle one)

Some grade school	4-year college degree
Finished grade school	Some school beyond college
Some high school	Professional or graduate degree
Finished high school	Don't know
Some college or 2-year degree	Does not apply

19. Circle the HIGHEST level of education completed by your step-father: (circle one)

Some grade school	4-year college degree
Finished grade school	Some school beyond college
Some high school	Professional or graduate degree
Finished high school	Don't know
Some college or 2-year degree	Does not apply

20. Circle the HIGHEST level of education completed by your step-mother: (circle one)

Some grade school	4-year college degree
Finished grade school	Some school beyond college
Some high school	Professional or graduate degree

Finished high school	Don't know
Some college or 2-year degree	Does not apply

21. What high school did you attend?

(If more than one, please give the name of the high school you graduated from)

_____

22. What is the location of high school attended (city, state/province, country)?

_____